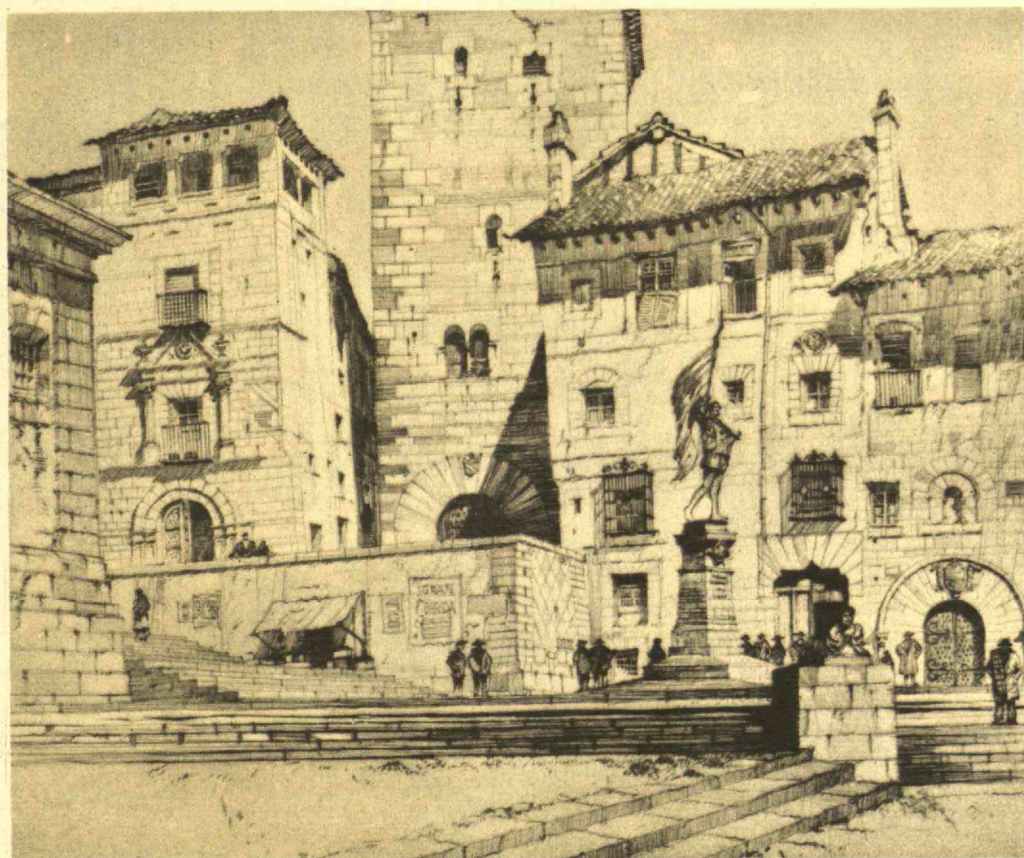


# THE TECHNOLOGY REVIEW



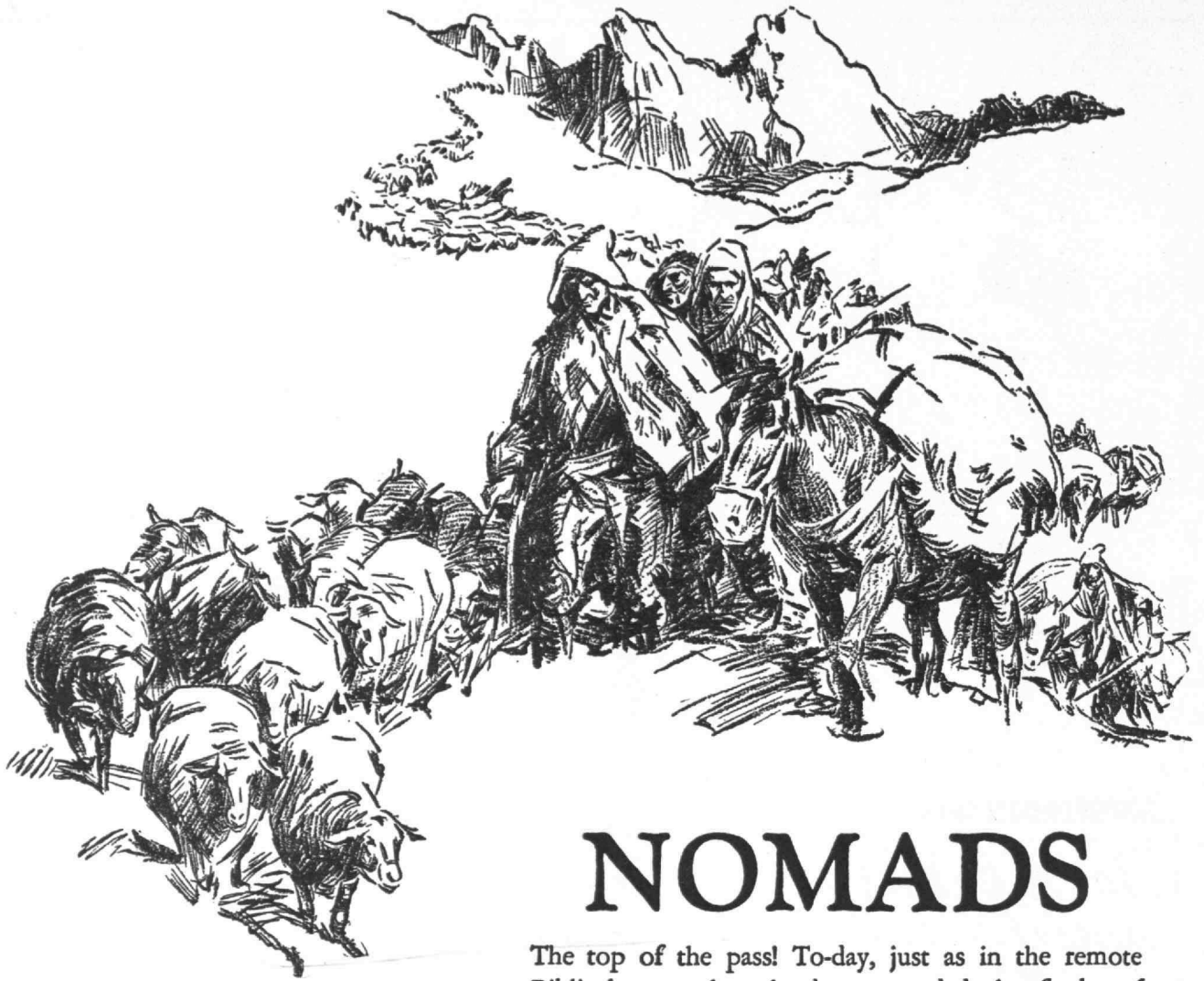
RELATING TO THE MASSACHUSETTS  
INSTITUTE OF TECHNOLOGY  
NOVEMBER • • • 1928

# technology review

Published by MIT

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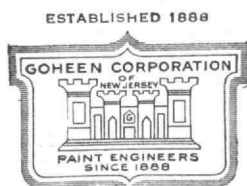
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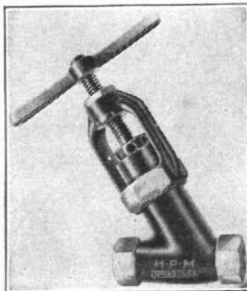
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Vice-Pres. in charge of Sales,  
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# The TECHNOLOGY REVIEW

Relating to the Massachusetts Institute of Technology

PUBLISHED MONTHLY FROM NOVEMBER TO MAY,  
INCLUSIVE, AND IN JULY

EDITORIAL AND BUSINESS OFFICES, ROOM 11-203  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE A, MASSACHUSETTS

VOLUME XXXI

NUMBER 1

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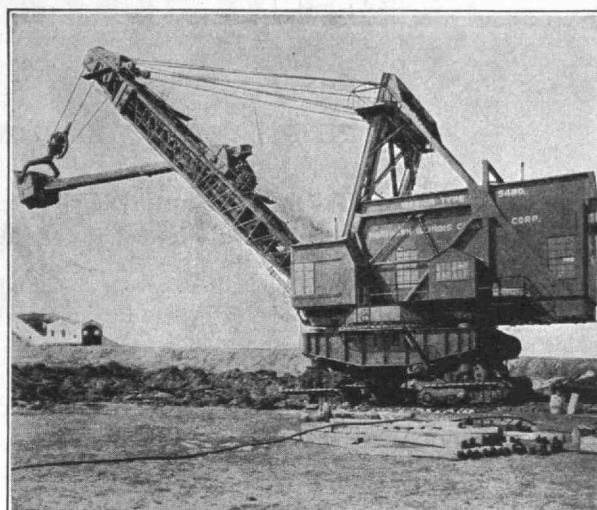
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J. D. CRAWFORD, '27 . . . . . Assistant Managing Editor  
R. T. JOPE, '28 . . . . . Circulation Manager  
J. J. ROWLANDS . . . . . Contributing Editor

Published monthly on the twenty-seventh of the month preceding the date of issue, at 50 cents a copy. Annual subscription \$3.50; Canadian and foreign subscription \$4.00. . . . .  
Published for the Alumni Association of the Massachusetts Institute of Technology, Alexander Macomber, '07, President; George E. Merryweather, '96, Harold B. Richmond, '14, Maurice R. Scharff, '09, Vice-Presidents. . . . . Editorial Office, Room 11-203, Massachusetts Institute of Technology, Cambridge A, Mass. Published at the Rumford Press, 10 Ferry Street, Concord, N. H. Entered as Second Class Mail Matter at the Post Office at Concord, N. H. . . . . Copyright, 1928, by The Technology Review. . . . . Three weeks must be allowed to effect changes of address. Both old and new addresses should be given.

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## THE TABULAR VIEW

**C**ONTRIBUTORS to this issue of The Review include an Assistant Professor and two Associate Professors at Technology, and a former Professor of the Petrograd Agricultural College. **❏** DONALD C. STOCKBARGER, '19, Assistant Professor of Physics at the Institute, has been interested in the study of radiations for several years. He attracted attention in 1926 by his work on "directional radio," the transmission of sound on a beam of ultraviolet light. He continued his researches with these radiations, and in 1927 lectured before the Society of Arts. Coming at a time when sun lamps of all descriptions are indiscriminately offered on the market, his article will have wide popular appeal. **❏** CHARLES TERZAGHI is an Associate Professor of Foundation Engineering here at Technology. He came to the Institute in 1926 from Robert College in Constantinople. Last spring announcement came of his being made a Fellow of the American Academy of Arts and Sciences. His story of his adventures in Central America forms an amusing account of a successful escape from laboratory routine. **❏** NIKOLAI A. BORODIN was chief specialist of fishculture in the Department of Agriculture of Russia before the Revolution, and Professor and Head of the Department of Fishculture and Fisheries at the Petrograd Agricultural College. He was sent by a Special Mission to continue his work for the American Museum of Natural History in New York and the Museum of Comparative Zoölogy at Harvard. During March, 1928, he delivered four lectures at the Institute on the fisheries and fishculture in Russia. He is well qualified to speak on conditions of scientific work in Russia from his observations there before and after the revolution. **❏** TENNEY L. DAVIS, '13, is an Associate Professor of Organic Chemistry at the Institute. Recently he was elected Secretary of a new division of the history of chemistry in the American Chemical Society. His review of the book by Dr. A. D. LITTLE, '85, is an important comment upon an important book.

**V**OLUME 31 of The Review again presents a series of etchings and one lithograph on its cover. All are the work of artists affiliated in some way with the Institute. The Editors are indebted to Professor WILLIAM EMERSON, Head of the Department of Architecture for his co-operation and constructive criticism in preparing the layouts. **❏** Mr. GEORGE C. WALES, '89, also offered helpful advice. The lettering for the eight covers was designed and executed by ROBERT C. DEAN, '26. **❏** "Plaza San Martin-Segovia," the subject on the cover of this issue, is the work of SAMUEL CHAMBERLAIN, '18. His original etching is on exhibition in the Print Gallery of Charles E. Goodspeed and Company during a special showing of his work now being held.

**A**SIDE from the cover, readers of The Review will notice the rearrangement of the magazine's contents and the new and broader emphasis on important work in the general fields of science and engineering. **❏** This is but a further fulfillment of The Review's policy of assembling and consolidating for its readers information not obtainable in any other single medium. In addition a new type, Garamont, has replaced the Caslon formerly used.

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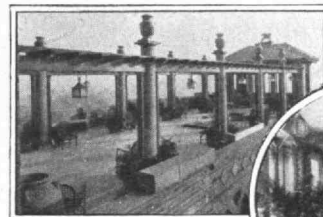
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# The TECHNOLOGY REVIEW

VOLUME 31

NOVEMBER, 1928

NUMBER 1

## CHECK THE SUN BATH

*Ultraviolet therapy as the physicist sees it*

BY DONALD C. STOCKBARGER, '19

DIRECT sunlight has been used systematically in therapy for only twenty-five years but radiations from the sun have long been known to exert a powerful influence upon vegetable and animal life. Primitive peoples have given the sun a prominent place in their religious rites, and in the Fifth Century before Christ, Herodotus, the Greek historian, records one of the first comments upon the apparent effect of sunlight on human beings.

"By the people inhabiting the place [in Egypt] where this battle was fought," he says, "a very surprising thing was pointed out to me. The bones of those who fell in the engagement were soon afterward collected and separated into two distinct heaps. It was observed of the Persians, that their heads were so extremely soft as to yield to the slight impression even of a pebble; those of the Egyptians, on the contrary, were so firm that the blow of a large stone could hardly break them. The reason which they gave for this was very satisfactory — the Egyptians from a very early age shave their heads, which, by being constantly exposed to the action of the sun, become firm and hard: this treatment also prevents baldness, very few instances of which are ever to be seen in Egypt. Why the skulls of the Persians are so soft may be explained from their being from infancy accustomed to shelter themselves from the sun by the constant use of turbans." Herodotus was an historian and not a heliotherapist, but his observations have as much scientific

validity as some of the experiments with ultraviolet light that have been reported recently in the professional medical journals.

The last few years have brought to the scientist an awakened realization that radiations from the sun are possessed of properties which make them valuable both in industrial processes and in the treatment of disease. Experiment showed that many of the radiations which were of value in therapy lay in the ultraviolet spectrum, although other portions of the electromagnetic spectrum

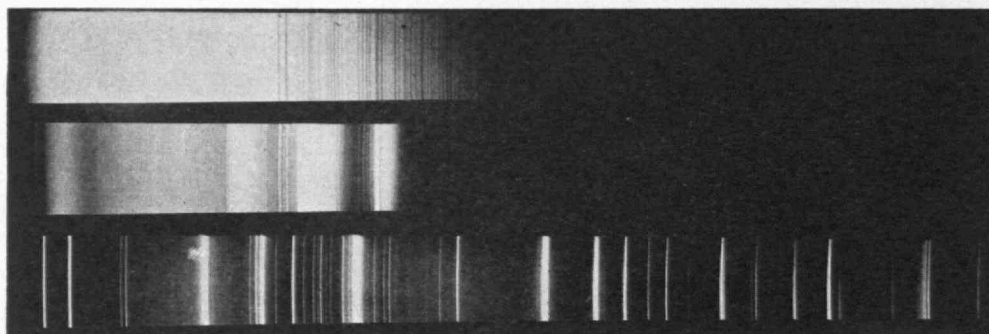
have also been shown to possess therapeutic value. The very short x-rays at one end of the spectrum have their uses; and toward the other end, we have it on the word of Dr. Willis R. Whitney, '90, director of the Research Laboratories of the General Electric Company, that energy from a fifteen-kilowatt vacuum tube operated on a wave length of six meters may be expected to have important therapeutic properties. Between these two limits there exists an infinity of radiations, but the ultraviolet in which we are interested occupies only a narrow band of them. If the ultraviolet spectrum were represented as one centimeter in width, a normal spectrogram would need to be about 5,000 miles wide to include the x-rays and a small part of the wave lengths used in radio broadcasting.

There are now upon the market for the unrestricted use of the public a number of lamps in a wide variety of sizes, each of which is more or less rich in a part or all of the ultraviolet.



KANE.

A SILHOUETTE OF THE ASSISTANT PROFESSOR OF PHYSICS WHOSE RESEARCHES UPON ULTRAVIOLET RADIATIONS ARE RESPONSIBLE FOR THE WARNINGS HE EXPRESSES IN THE ACCOMPANYING ARTICLE



TOP TO BOTTOM: SPECTROGRAMS OF RADIATION FROM THE SUN, A CARBON ARC, AND A QUARTZ MERCURY ARC. THE VISIBLE SPECTRUM IS AT THE LEFT; THE ULTRAVIOLET EXTENDS TO THE RIGHT. THE SUN SPECTROGRAM WAS MADE ON A SMOKY DAY AND SOME OF THE SHORTER ULTRAVIOLET RADIATIONS WERE ABSORBED BEFORE REACHING THE INSTRUMENTS

These are the devices in popular use for producing "artificial sunlight," and it is possible to obtain anything from small incandescent lamps up through larger incandescent lamps, mercury arcs, and carbon arcs such as are in use by some hospitals and private clubs. It is possible for the individual to obtain any type of lamp he wants for home dosing, but whether that is either a desirable or a safe procedure is an open question of which I shall speak later. Almost all of these have the approval of the medical profession and are, in general, I believe, considered by them to be free from the taint of quackery.

A PHYSICIST who intends to comment upon a medical problem must first clear from the minds of his readers any suspicion that he is profaning holy ground, by stating that he pretends to no knowledge of medicine. Therefore I state at once that I know no more about medicine than the average medical man knows about physics. Society has a way of protecting itself against physicists who would practice medicine without first learning something about the subject; but, strangely enough, it places no obstacle in the way of the medical man who would use the tools of the physicist in his profession without first acquiring a competence in physics. So when I see powerful sources of radiation used in an attack upon therapeutic problems by both laymen and physicians who know nothing more about them than the method of turning them on and off (indeed, I have heard of some that could not even do that), I am inclined to wonder whether the State should not control the practice of physics.

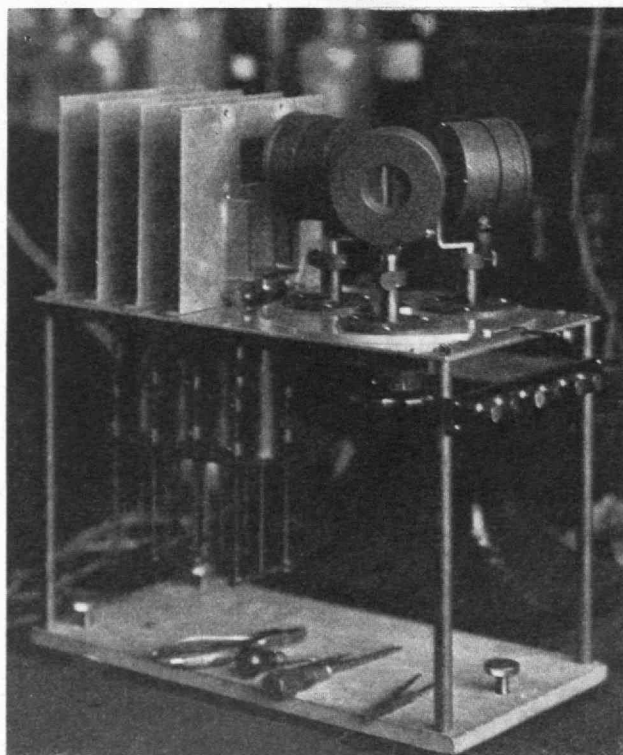
In the course of his professional training, the medical

report his successful treatment of an unusual case to his professional journal telling how he had administered every hour in a glass of hot water two pink, sweetish-tasting pills, weighing three grains each! But probably that same practitioner, reporting his treatment of a case of rickets by irradiation, would be content to report that he had used such and such a type of arc lamp for so many minutes of exposure. He might add the operating voltage and the distance of the irradiated surface from the source, and feel satisfied that he had presented a thoroughly

scientific report, little realizing that such a description of conditions has but little more physical meaning than "two pink, sweet-tasting pills" has chemical meaning. If a report upon the action of apparatus involving physical principles has no physical validity, how can it hope to benefit the other members of the medical profession?

The invisibility of the radiations in the ultraviolet is to blame for a general failure to realize that the ultraviolet region contains a whole band of radiations of different wave lengths, or to borrow a word from the visible spectrum, radiations of different "colors." Each of these invisible colors is as different from the others as red is different from blue or green. In applying ultraviolet to industrial processes it has been found that the different colors of the ultraviolet produce vastly different

effects upon chemicals; indeed, a number of chemical reactions can be made to reverse by altering the color of the applied radiation. Parallel examples occur in therapeutics: for example, the radiations essential to a cure of rickets occur in a narrow band near the visible spectrum, the presence or absence of this so-called "Dorno" or



THE DELICATE APPARATUS FOR MAKING ANALYSES OF RADIATION FROM SOURCES OF ULTRAVIOLET. THE SENSITIVE THERMOMETER IS IN ONE OF THE CYLINDRICAL HOUSINGS AT THE RIGHT



"vital" region being all the difference between failure and an effective cure. It is this vital region in sunlight which fails to pass through ordinary window glass.

Since, as we have seen, the value of radiation varies with the color, the necessity for a definite knowledge of the quality of the radiation is most important for the individual user of ultraviolet sources. It is also necessary, if experiments in therapeutics are to have any scientific value, that the physical conditions of the experiment be accurately controlled. Almost no two lamps of different types produce either the same quality or the same intensity of radiation. Obviously, then, it is necessary that the specifications for radiation be given in easily duplicated physical terms. Lamps of the same type differ from each other, and even when a given source has been tested and certified by a competent physical laboratory, the data obtained hold only for a given voltage and current, for the original optical equipment in good condition, for a given kind of electrodes and a given spacing between them, and for a given distance of the irradiated surface from the source. A variation in any one of these conditions may cause tremendous differences in the quality and intensity of the radiation. Mishandling in shipment, a bump with the janitor's broom, and normal aging may make valueless the original laboratory certification.

If the physician is to raise his use of ultraviolet therapy to the same high scientific plane as his use of drugs, he must be able to check for himself the intensity of radiation from his lamp in any spectral region. Unfortunately, the physicists have not kept themselves alive to the needs of the medical men, so that today there is at the disposal of the individual practitioner no satisfactory simple means of making this measurement. We who specialize in radiation measurements look upon the problem as one of moderate difficulty, for the very careful use of delicate instruments is required. In the ordinary measurement the radiant energy falls upon a blackened, thin strip of metal which thereby becomes warmed, the resulting rise in temperature being measured by an electrical thermometer that is sensitive to a change of less than one-four thousandth of a degree Centigrade. Physicists all over the country are now trying to develop devices which will be as simple to use as the microscope; but until such an instrument appears, the physician must seek the cooperation of the physicist in making periodic checks upon the quality and intensity of the radiation from his lamp, especially when he anticipates reporting the results of his work to his colleagues.

Even a device such as I have mentioned will not relieve the physician from the necessity of learning the physics of his equipment, and the absence of such a device from the market now cannot be blamed for any failure to realize that he has a problem before him. Nor is its absence any excuse for the low scientific standard of technique in physics which appears

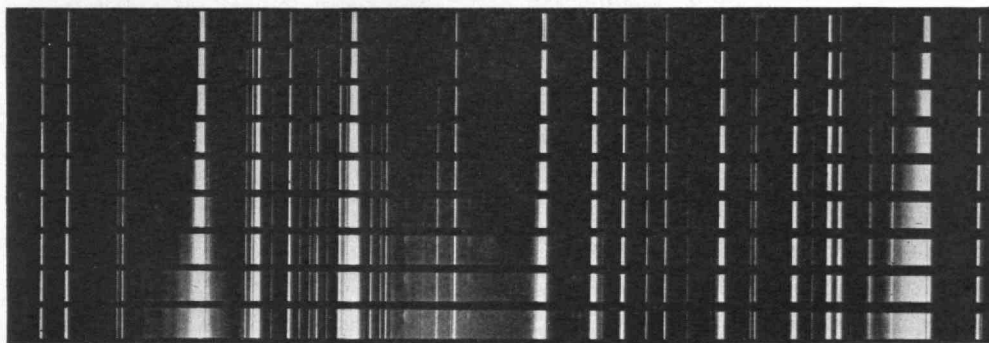
here and there in the reported biological researches, to be corrected later by those few medical men who have a good knowledge of physics.

THE widespread use of all kinds of sources of radiation by the public requires much experimental study to determine whether or not their use is in any way harmful. Fundamentally, this is a subject for an earnest and careful study by the medical profession, but a few sidelights upon it are of concern to the physicist. There are, it seems, at least two well-defined schools of thought among the members of the medical profession: those who believe that all kinds of ultraviolet radiation are harmless, and those who expect to discover that certain radiations are harmful and dangerous. Only exhaustive experimentation will determine which school is correct. Always there are present the conservatives and the radicals, believing on the one hand that no new thing is good, and on the other that no new thing can be bad. When physicists all over the country were experimenting with x-rays many years ago, the medical profession was slow to give warning that these rays might be dangerous, but at least one Professor in the Department of Physics at the Institute now shudders when he recalls how carelessly he played with radiations thirty years ago which today he would handle with every precaution.

The discovery of anaesthetics, on the other hand, aroused many of the conservatives who prophesied dire results if they were administered to any but perfect physical specimens. Now that the limitations of anaesthetics are known, they are given by experienced men without fear of failure.

It is my own belief that the less powerful sources of radiation will be proved not dangerous, especially if they emit no part of the spectrum which does not normally reach us from the sun. If the source is weaker than sunlight, it is reasonable to suppose that no harm will come from its use by persons who are able to expose themselves to sunlight without ill effects. It seems probable that in most instances the use of radiation by either the layman or the inexperienced medical man is attended by much less danger than the indiscriminate use of drugs by the public. There is current, however, an opinion expressed by many physicians that the use of ultraviolet may be dangerous, and the following quotation from a physician writing in *Physical Therapeutics* emphasizes the necessity for a thorough study of the possibilities of danger by the

(Continued on page 62)



NINE SPECTROGRAMS FROM THE SAME QUARTZ MERCURY ARC OPERATING UNDER SUCCESSIVELY DIFFERENT ELECTRICAL CONDITIONS. THE CHANGE IN QUALITY OF THE RADIATION IS STRIKINGLY SHOWN. THE VISIBLE SPECTRUM IS AT THE LEFT; THE ULTRAVIOLET EXTENDS OUT TO THE RIGHT



# LANDSLIDES IN

*Investigated by a member of the Institute  
after three years of*

By CHARLES

**A**N ENGINEER can hardly look at personally conducted tours or at tourists, plain and simple, without wonder and pity because he is spoiled by his profession. He craves for insight. If you descend with an engineering eye into a foundation pit in East Boston, you cut at once into the very bottom of things. You see at every lift of the shovel something that no human eye has ever seen before, and you see it free of charge. The ordinary travelers merely skim over the surfaces, and what they are shown is practically worn out by thousands of preceding glances.

Hence, nobody would suspect me of having taken a sight-seeing trip. My aims were therapeutic and geologically pathological; the sights were merely a by-product. I wished, first of all, to establish personal contact with the Panama Canal slides. Since I failed to see them in 1912 when they were alive, I wanted to pay tribute at least to the corpses. In Panama, an opportunity was offered to report to the chief engineer of maintenance of the Canal on a reservoir site in the drainage area of the Chagres River. I remained three weeks, without a single sunstroke. In Costa Rica I wanted to get acquainted with the classical landslides along the railroad Port Limon-San José and to combine the study with a side trip to one of the active volcanoes. From Port Limon I intended to get somehow to Tela in Spanish Honduras. It looks on the map simpler than in practice. I landed in Puerto Castillo, not far from Trujillo, and the United Fruit Company mobilized all kinds of vessels to get me

to Tela, where I settled. In Tela I was expected by the United Fruit Company to try out a new method for investigating the drainage properties of cultivated and of potential banana lands. The tests were successful but rather trying and lasted four weeks. The next goal of my ambition was the imposing volcanoes of southern Guatemala. On the way to Guatemala City there was some more engineering: a discussion with the United Fruit Company's officials of the methods for taming the insolent Motagua River. From the highlands of Guatemala I was supposed to move to Mexico City and to speak before the Mexican Society of Civil Engineers. My Mexican friends had also arranged for a party on the volcano Popocatepetl. Instead of joining them I retired with a bad infection to the hospital of Quirigua in Guatemala. But I survived.

When we sailed out from New York on June 13 and floated along the coast of the two Carolinas, the ocean was blue and calm and lovely, and the honeymooners on board the *Metapan* were beaming. A few days later the honeymooners discovered that the beloved of their hearts were strangely transformed, not exactly to their advantage, and when we approached Colon after a brief stop-over in Kingston, Jamaica, the dining room was as solemn and deserted as a graveyard after a funeral. Nobody regretted when Cristobal turned from an empty word into a noisy, sultry reality.

A former student of mine, Lt. Vandervoort, was kind enough to make all arrangements beforehand, and two



GOLD HILL AND EAST CULEBRA SLIDE. SUBDUING THE SLIDES WAS A VICTORY OF STEAM-SHOVELS, PERSISTENCE AND NERVES, WHILE THE SPIRIT OF ANALYSIS KEPT MODESTLY IN THE BACKGROUND



# CENTRAL AMERICA

*Faculty who desired some out-of-doors exercise  
solitary confinement*

TERZAGHI

days after my arrival in Corozal I knew already how beastly the tropical sun can burn when one climbs over a slide from the tongue towards the rear. The slides were rather disappointing except for three beautiful specimens (East-, West-Culebra and Cucaracha slides) located on both sides of rugged, rocky hills called Gold, Zion, and Contractors Hills. Here the movements spread over a broad belt, far beyond the neat lines of excavation. After a couple of days of strenuous physical exercise between huge chunks of broken earth I was compensated for my efforts by looking down on the scene of destruction from the cockpit of a gorgeous 900-horsepower bombing plane. The view was most impressive. The black basalt hills stand like huge ruins between trough-like, yawning gaps produced by the greenish shales of the soft Cucaracha formation flowing towards the canal over a width of several thousand feet. One cannot see these gaps without deeply regretting that no lesson was learned from the gigantic earth work experiment. Subduing the slides was a triumph of steam shovels, persistence and nerves, but no serious attempt was made to investigate the underlying physical causes for the benefit of future enterprises of a similar nature. Even the very modest research program proposed by a committee of the National Academy of Sciences in 1924 remained on paper.

During the past year approximately eighteen vessels per day passed through the locks against a possible forty-eight under full operation. No shortage in water has thus far been experienced. However, in order to avoid

future difficulties arising from abnormal dry spells, the Canal Commission intends to build a \$500,000 masonry dam, 150 feet high, across the Chagres River, creating an artificial reservoir with an area of about twenty square miles tributary to Lake Gatun. The entire region is covered with primeval forest. Since the underground of the major part of the reservoir site consists of limestone, rivers and brooks disappear in caves and sinkholes as they do in the Croatia, or in Yucatan. In order to prepare a preliminary report on the possibilities of leakage around the wings of the proposed dam, I joined a survey party going up the Chagres River. The surveyors remained at the dam site and I, with the head of the surveying department of the Canal Commission and two Indian guides, went up the river to examine the sinkholes. As far as we proceeded upstream, the river was confined between white, rugged limestone cliffs with fantastic shapes. At the border of the forest which covered the steep slopes above the cliffs, festoons of climbing bamboo formed an almost continuous curtain, and the scenery, as a whole, was of supreme austerity. On our last trip into the sinkhole area, while attempting to explore one of the caves, we were caught in a terrific thunderstorm. In no time the shallow ravines were filled with yellow, roaring brooks which had to be forded in a hurry because the discharge increased rapidly. Between the brooks our Indians cut the way through the forest with remarkable speed and vigor. When we reached our canoe at the bank of the Chagres River the vitality of this water course



MANIFESTATION OF THE DEMOCRATIC SPIRIT IN ANTIGUA, GUATEMALA. ANIMALS AND MEN ARE PERMITTED TO QUENCH THEIR THIRST AT THESE FOUNTAINS WORTHY OF KINGS

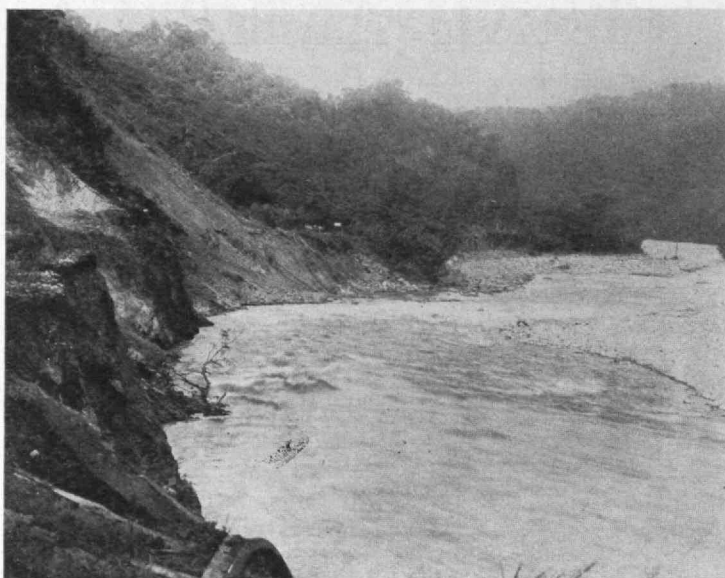




had visibly increased. The paddlers had a hard time to navigate the vessel and finally the boat was sucked by a violent current under an overhanging cliff, whereby the cargo, humans included, was cruelly transferred into the water. After I had succeeded in getting ashore and climbing a cliff, I saw the head of the survey department floating away as one of the appendages of the upturned boat, with his pipe still in his mouth. He lost it later in a more advanced phase of his struggle for air. The top of my cliff was already occupied by one of our Indians. The Indian serenely contemplated the new holes in his trousers without more than a furtive glance at his floating companions. He was above such trifles. Somebody has claimed that a true engineer thinks of adventure as a nuisance. I fully agree. My beautiful No. 75 Kodak was gone and its predecessor of equal quality had perished under similar circumstances a few years ago in the Marmora Sea, between Europe and Asia Minor.

In Costa Rica I tried to keep away from the open water, considering the volcanoes a safer proposition. The reception I received in the capital, San José, was most cordial because of the pleasant impression left by our colleague, Professor John W. Howard, '03, mountaineer and expert topographer, an impression which serves in that country as a permanent advertisement for Technology. However, nobody seemed to share my enthusiasm for climbing the Costa Rican volcanoes in the rainy season. Finally, one of our Institute students, John J. Bolaños, '30, cordially offered to show me why the others did not like the idea. Climbing between two and five A.M. on muleback through a pitch-dark tunnel in the virgin forest, we repeatedly descended, mules and men, into depressions of unknown depth, and it was difficult to convince the animals of the urgent necessity to proceed towards greater altitudes. We were, however, fully compensated for our physical sufferings by an unusually clear view from the top of the Poas Volcano, over the Continental Divide, and by lively doings at the bottom of the crater.

For me the chief attraction of Costa Rica centered around the landslides to which the Northern Railway of Costa Rica owes part of its well-deserved reputation. Personally, I consider the trip to Costa Rica a partial failure because even the steepest slopes refused to move while I was there. But I had at least a chance to examine the traces of past activities of the soils along the curves of least resistance. Railroads in the tropics must be cheap in



GORGEOUS VALLEY OF THE REVENTAZON RIVER IN COSTA RICA. THE SLOPES OWE THEIR TEMPORARY STABILITY TO A STRANGE ACT OF PROVIDENCE RATHER THAN TO THE SHEARING STRENGTH OF THE MATERIAL

order to pay. Since even the Swedish state railroads when crossing difficult country find it impossible to play 100 per cent safe, one cannot expect in the wilderness of the Reventazon Valley of Costa Rica a fool-proof right of way. Along this line in the course of the forty-five years of its existence all types of slides have occurred, ranging from progressive creeping up to structural slides of considerable magnitude. On account of some secret agreement between Providence and the railroad management the slides never go off when a train passes by. The advanced Swedish railroads with their elaborate management have been in that respect very much less fortunate.

West of San José the railroad is not operated by the United Fruit Company (Northern Railway of Costa Rica) but by the government. It terminates on the Pacific side in Punta Arena. This place honestly deserves its name. It seems to represent the tail end of the universe. The sleepy village is adjacent to a vast sheet of calm, olive green water bordered beyond the bay by the dark blue, desolate mountains of the peninsula of Nicoya. A deserted pier led from the coast to the dark hulk of an English tramp steamer which seemed to have ventured into these waters by an incomprehensible error. A flock of bathing Cuban chorus girls was the only indication that there is civilization in the East, beyond the mountains. My young Institute traveling companion, cheerfully smiling, recognized the brand with expert eye and at first sight at a distance of 150 yards.

Spanish Honduras proved to be a country far less advanced but much more fraught with latent surprises than Costa Rica. For the first time I felt the spirit of this country when standing in Trujillo at the grave of Walker, the famous American buccaneer. A square grass covered terrace; a smooth white prison wall at the right; military headquarters populated with poorly uniformed, underfed native soldiers at the left; and in front, at the foot of an almost perpendicular cliff, the blue and silent waters of the Bay of Honduras washing in the distance



MAYAN STELLA NEAR QUIRIGUA, GUATEMALA. UNITED FRUIT COMPANY'S EXPERTS TRYING HARD TO IMBIBE THE SPIRIT OF A BYGONE CIVILIZATION



BOARDING THE STEAMBOAT ON LAKE ATITLAN. THE METHOD OF CARRYING BABIES IN A BLANKET ON THE BACK IS MUCH MORE HUMANE THAN CROWDING THE POOR KIDS INTO A FORD CAR AS SOME OF US DO

white sandy beaches fringed with coconut palms. One could not possibly select a more adequate location for being shot and killed and buried on the eve of a lively career.

From Trujillo westward as far as Livingstone, a distance of about 250 miles, extends part of the kingdom of the great American fruit companies. Tela, half way between these two points, is the main seat of the tropical research carried on by the United Fruit Company; a place where the finest tools of science are employed for increasing the efficiency of fruit-growing located at the very rim of the jungle. There is not even a road leading from this spot to the capital of the state, Tegucigalpa. Connection is maintained by the United Fruit Company's postal plane. With Tela as most enjoyable headquarters, my efforts were directed towards determining the drainage properties of undisturbed forest soils. In order to secure our specimens we had to excavate in the green shadow of the jungle and I am sure the mosquitoes got at least as much satisfaction out of our efforts as we did. It was a cruel experience. Geological survey within the forest area was found to be almost prohibitive. To get at least a preliminary conception of where to prospect for information one has to survey the country from an airplane. When whizzing down toward the landing field after a very instructive journey over the Chamelecon and the Ulua valleys I expected to experience a most thrilling resistance contest between our plane and a radio tower, but my anticipation was premature. According to my old-fashioned conceptions of aviation, derived from war-time experience, one should clear an obstacle if possible by a couple of feet. A modern aviator seems to prefer to miss it by a couple of inches. After the landing, Mr. Thomas, manager of the Tela Railroad Company, a Harvard man, bachelor and accomplished host, served the party with a unique and marvelous cocktail called "The Aviator's Delight." I would not, however, advise one to imitate this mixture with ingredients secured on Beacon Hill.

The hothouse atmosphere of Honduras intensified the desire to get some fresh air in the mountains which adorn the rim of the Pacific slope of Guatemala. A series of cones, incredibly bold and beautiful, rise above the coastal plain to an altitude ranging between 8,000 and 13,000 feet. During the rainy season, in the morning, they stand, sharp and blue, against a clear sky, while in the afternoon the peaks are invariably concealed behind a wall of heavy clouds. One travels on the International Railroad of Central America, a New York enterprise, to some convenient point in safe distance from the Mexican border, and secures a companion, mules and an Indian. In my case, Dr. Goebel of Guatemala City was kind enough to make these arrangements beforehand, through the management of one of the Fincas of his firm, Schlubach and Sapper. The outfit crosses the belt occupied by the coffee plantations and disappears in a tunnel of green. There is hardly anything more impressive than to follow at sunset and on muleback an Indian trail along the border between the tropical, virgin forest and the rim of a canyon wall, in one of the narrow valleys leading down from the highlands towards the coastal plain of Guatemala. On such occasions the grandeur of the tropical wilderness is overwhelming. "The hills are big and the sun is dangerous and the dark comes, bang, on the heels of day. Houses can't shut away the feel of earth. It is too much alive, too great and deep and strong."

The Continental Divide marks also the boundary between modern times and the middle ages. Beyond the divide the country is almost exclusively occupied by fairly independent Indian tribes, laboring and trading as our ancestors did in the days of the feudal régime. The trails crossing the Divide are populated with Indian traders carrying incredible quantities of merchandise and whole families of feathered animals on their backs from village to village. The charm of the highlands reaches its climax in the vicinity of Lake Atitlan. This lake is nearly circular, about ten miles across, and it owes its unusual beauty in part to the deep blue color of the water, in part to the classic skylines of the volcanoes of Atitlan and San Pedro which rise above the south shore to a relative altitude of about 8,000 feet. Once every morning a small steamer, owned and navigated by one of the few white inhabitants of the region, travels across the lake. I marveled at how many Indians and mules this vessel can swallow on a market day. The pilot operating

CLIFFS AT THE BANK OF THE CHAGRES RIVER, NEAR THE SPOT WHERE THE PARTY CHOSE TO MOVE FROM THE CANOE INTO THE WATER





the wheel in the center of the boat was wedged in between red-skinned compatriots and huge piles of merchandise. A parrot suspended in a cage in front of his face was the only thing he could possibly see. His navigation was exclusively guided by shouted instructions which came from an invisible lookout. Starting before sunrise from the Indian village, Atitlan, I reached at noontime, with a German traveling companion, the crater of the extinct volcano Toliman. However, the joy which we experienced at the sight of the magnificent lake reflecting the cliffs and canyons of the north shore did not improve the sight of our garments, soiled and torn after five hours of working our way through the forest. Our guide had deserted us a short time after we entered the forest and we had to perform the cutting of the trail ourselves. A small group of Indians, resting at the rim of the crater, mistook us for roving bandits hunting for cattle and only the high-grade quality of our "Agua Caliente" (Johnny Walker) convinced them of our peaceful intentions.

No trip to the tropics is complete without lying down for a while in a hospital for the purpose of contemplating the vicious character of tropical parasites. I postponed this feature until the very end of my trip and selected as a



THE AUTHOR

field for my inactivity the United Fruit Company's hospital in Quirigua. On account of the skill and charming personality of the chief physician, Dr. MacPhail, philanthropist of pure Scotch extraction, preference should be given to this place over any other in Central America. The nurses also are very attractive. Unfortunately they know no more about English than the patients know about surgery. Every Saturday a wave of excitement passed through the otherwise peaceful institution. They brought in the corpses and chopped-up bodies of the Indians who settled their arguments on pay day with guns and machetes. Both love and hatred in the tropics are violent, but the candles burn up rather rapidly.

While recovering in the shadow of the coconut palms of the hospital garden I gradually recognized the deep truth of the statement of a passage which I recently read in Sinclair Lewis's "Arrowsmith": "The tropics are one of the best jokes of God. He planned them so beautiful — flowers and sea and mountains; he made the fruit to grow so well that man needn't work — and then he laughed and stuck in volcanoes and snakes and damp heat and malaria. But the nastiest trick he ever played on man was inventing the flea."



LAKE ATITLAN

GUATEMALA



# SCIENCE IN SOVIET RUSSIA

*Difficulties and discouragements beset investigators in the U. S. S. R.*

By NIKOLAI A. BORODIN

THE first half of that terrible decade, 1917 to 1927, was a critical period for the Russian scientists as well as for the whole Russian people. Revolution, anarchy, civil war, famine — all these misfortunes came like avalanches one after the other so that normal life and work stopped and only a few heroic individuals were still able to proceed with scientific research and then only under unbearable conditions.

During the second half of this period, however, the conditions of life and work in Soviet Russia and for Russian exiles in foreign countries became more adequate and scientific work was resumed and carried on with some success. Speaking generally, most of it was a continuation of work begun before the war under normal conditions.

I will describe first the fate of the Humanitarian Sciences in Soviet Russia. It is significant that most of the works on history during the last decade were published by Russian historians outside Soviet Russia. In part this resulted from the hostile attitude of the present rulers of Russia to Russian history and the history of other countries unless treated from the proletarian point of view. Furthermore, former professors of history could no longer apply their knowledge because the chairs of history and sociology were abolished in the universities of Soviet Russia. Professors of ancient and Russian history were forced to emigrate and to work abroad. The most eminent scholars in ancient history, Professors M. I. Rostovtzeff and A. A. Vasilieff, are both teaching in the United States — the first at Yale University and the second at the University of Wisconsin.

There is one branch of humanitarian science which flourished in Russia particularly, namely Oriental languages and the history of Oriental literature and art. There existed a special faculty of Oriental languages at Petrograd University and two special Institutions of Oriental Languages at Moscow and Vladivostok. Most important studies in this branch of science were made by Russian orientalists and many valuable works on this subject were published by them before the war. The faculty of Oriental languages at Petrograd University was discharged by the Soviets and an Institute of Living Languages was established in its stead. Its task was that of preparing propagandists of Communism for oriental countries. Though some of the "have been"

eminent orientalists remained in Russia — Academicians S. Oldenburg, Marr, Bartold — it is significant that they became very inactive and no comprehensive new works have been published by them during the past decade.

Sociologists in Soviet Russia are "undesirable characters" unless they are willing to teach exclusively the sociological and economic theories of Karl Marx. Conse-

quently Russian sociologists of the younger generation have emigrated or have been banished to foreign countries. One of Max Kovalevsky's disciples, Pitirim Sorokin, was engaged to teach sociology in the University of Minnesota. Professor P. Sorokin, besides regular lecturing, published a large number of comprehensive books on his specialty, in Russian and English. Some of them appeared in German and even in Japanese.

In the Natural Sciences (pure and applied) some successful work was done in the domain of Physics. The name of a young Russian professor, Lev Thermin (or Theremin) and his invention is of course familiar to you. Professor Theremin's successful results were obtained after long and assiduous study and experimenting on converting electricity into sounds in the laboratory of the Physico-Mechanical Institute of Leningrad.

Several eminent physicists are connected with the Moscow Institute of Biophysics, headed by Professor Lazarev. He himself, M. Smoloukhovsky, Slutsky and V. Romanovsky of the same Institute are working on similar physical and mathematical problems, as for example Lazarev on the photo-electric theory of light, Smoloukhovsky on the theory of probabilities as applied to

physics, Slutsky on biometry, V. Romanovsky on mathematical statistics. They achieved worthwhile results in their research work and are recognized authorities in this new branch of physical and mathematical science. It must be mentioned, by the way, that all these scientists are followers and developers of the principles of mathematical statistics of the late A. A. Chuprov of Petrograd.

Much was done in Russia in the domain of Human Physiology. The name of the famous Russian physiologist, Professor I. Pavlov, is probably known in this country better than that of any other Russian scientist. This is due not only to his world-wide fame, but also to his visit to the United States in 1926 for the International



PROFESSOR BORODIN, FORMERLY HEAD OF THE DEPARTMENT OF FISH CULTURE AND FISHERIES AT THE PETROGRAD AGRICULTURE COLLEGE, IS AT PRESENT DOING ICHTHYOLOGICAL WORK WITH THE AMERICAN MUSEUM OF NATURAL HISTORY

Congress. Professor Pavlov continued Scehenov's studies and made remarkable achievements in this domain. He and his numerous assistants (seventy in number) worked on relations between different organs and the central cerebral system. A summary of this twenty-years work was published in a book under the title "Twenty Years of Study on the Higher Activities of the Nerves or Behavior in Animals." It was later translated into English (Oxford University Press).

It is remarkable that Professor Pavlov is one of the few Russian scientists who stood untroubled in his laboratory at Petrograd as if in a fortress and continued his studies during the World War, revolution and civil war. It was really a heroic effort to continue the scientific work in the midst of great privations, in an unheated laboratory, by the light of oil lamps and often without enough money to buy the simplest materials needed for experiments. This meant self-sacrifice. But, happily, he has been fortunate enough to withstand all these hardships and though aged seventy-nine, is still continuing his valuable investigations. In 1904 he received the Nobel Prize for his work on digestive glands. Since that time he has made many discoveries concerning the functions of the heart, digestive and nervous systems, which are mentioned in every modern text-book on physiology. The most important efforts of Russian zoölogists who remained in Soviet Russia were devoted not to theoretical problems, but to field-work such as zoölogical exploration of new places or laboratory experiments on applied zoölogy. Here might be mentioned the Institute of Experimental Biology at Moscow with Professor Kolzoff at the head. Connected with this is the Anikovo Institute, devoted especially to genetic studies, morphology and ecology. They are doing good work at these institutions. Two biological stations, one established in the remote and little known region on the coast of the Baikal Sea, near Irkutsk, and the other on the Pacific Ocean at Vladivostok, attract the particular attention of Russian zoölogists. For such institutions of applied science it is comparatively easy to receive money under the present conditions in Russia. This is proved not only by the erection of new stations mentioned above, but also from the fact that money had been granted for the continuation of the fish-cultural work in Baku, Astrakhan and for the erection of another new ichthyological station at Kerch, Crimea.

Pure zoölogy encounters hardships in Soviet Russia. Especially is it difficult to get money for printing the works completed long ago and still lying idle in the scientific institutions. Such is the situation at the Academy of Sciences and all universities. Only lately in the official Soviet organ *Pravda* an interview was published with a prominent academician who is very old and complained that his valuable materials might be lost for science because there are no funds for publishing them. The newspaper mentions that an important book of Academician P. Soushkin about Altai Birds could not be published in Russia and is being printed in English in the United States, that Academician V. Vernadsky (mineralogist) had published his work in Paris, and so on. Only

short articles by young zoölogists of no great importance are printed in Russia.

In one special branch of zoölogical science — bacteriology which is closely connected with medicine — some important achievements can be mentioned. I refer to the works of two Moscow bacteriologists — A. Kedrovsky, who became known by his discovery of the microbe producing leprosy, and Professor N. Gabrichevsky, recently deceased, who discovered the anti-diphtheria serum.

Summing up this review it is evident that in spite of revolution, civil war, and all obstacles in the way of scientific work in Soviet Russia, Russian scientists have made their utmost efforts to continue their favorite work, studies and explorations in different branches of science, and that some of them have made important achievement during the last ten years.

However, the disastrous events of these years in Russia have thrown a large majority of scientists out of work. A great many of them died or emigrated so that many university chairs became vacant and there is little hope of filling them in the near future because among the younger generation there are few, if any, that are eminent or promising. The bad effects of the disturbed situation in Russia are still far from eradicated and the scientific institutions still lack adequate resources for conducting their work successfully and for publishing its results.

I would like to say a few more words about teaching in the universities and colleges in Soviet Russia. The higher education has become a privilege of the proletarians and communists. The Soviet government made all efforts to protect the young men of working classes and to bar the doors of colleges for the children of the bourgeois and intelligentsia. This was the cause of many tragedies in the families of the young educated people, including scores of suicides of the young men not admitted to the colleges exclusively because of their origin. On the other hand, the workmen were admitted to the colleges without training even by an elementary school. The presence in classes of many boys, unprepared for studying the college courses and undisciplined, resulted in much confusion throughout the whole system of teaching.

Furthermore, the representatives of the commissariat, often ignorant, were permitted not only to attend the meetings of the professors, but also to have a hand in the methods of teaching. Thus, the situation of the professors from the moral point of view, became hardly endurable.

It is true that later it has been bettered. The professors insisted on an examination of applicants for college education. When this was finally granted in 1925-26, eighty-six per cent of the applicants did not pass the examination and were not admitted.

But the unpleasant interference of the commissariat's representatives still remains in almost all institutions where teaching is conducted. Only the scientific institutions which are not concerned with teaching are enjoying more freedom in their work. There the interference of commissariat representatives is limited to fixing the annual appropriations. As a result the most important scientific works during the period under consideration were made just in these institutions.





## *Single Sleeve Engine*

**M**EMBERS of the Institute's staff engaged in automotive engineering research have announced the development of a new, greatly simplified, four-cycle automobile motor with a single sleeve valve mechanism that eliminates the defects that have hitherto prevailed with this method of valving. Professor Dean A. Fales, '14, who has been in charge of the engineering tests and development of the motor for its inventor, Luther A. Gaw, reports that the engine constitutes a notable advancement in the design of sleeve valve motors.

Three patents have been granted Mr. Gaw covering (1) the single sleeve design, (2) the positive cam driving the sleeve, and (3) the cell type of head embodied in the motor. The sleeve is so constructed that no harmful burning occurs around the edges of the parts, the simple up-and-down reciprocating motion of the sleeve giving a sharp opening and cut-off. The weight of the sleeve is very small and consequently it is capable of being operated at high speeds and further power advantages are made possible by the relatively fewer working parts. Lightness is achieved by constructing the sleeve of steel tubing, a method that obviously simplifies the production of the engine. The photograph at the right shows the construction of the motor; the sleeve is sandwiched between the piston and cylinder wall, the fulcrum and positive cam driving the sleeve is shown, and the position of the ports is made clear. The photograph shows the exhaust port partly open.

Such is the design of the camshaft that it may be built extremely rigid, thereby eliminating the torsion or twisting that occurs in the eccentric shafts of most sleeve valve motors that are now built. The contact combustion chamber with the exhaust port on a lower level than the intake gives good turbulence to the entering gas and makes possible what is known as a stratified charge — a condition where the new gas forms a layer at the top of the cylinder next to the spark plug and the unexhausted dead gas remains between it and the piston top. While its valve timing is somewhat limited, the single sleeve offers enough range of adjustment for ordinary conditions. Because of the compact combustion chamber the engine has a very high compression ratio.

Several of the engines have been built for experimental purposes

and they have been tested on the road and on dynamometers. Beyond question these tests have shown that the motor is practical, that it may be produced economically, and that it is possible to refine its design and thereby achieve an efficient and smoothly operating motor.

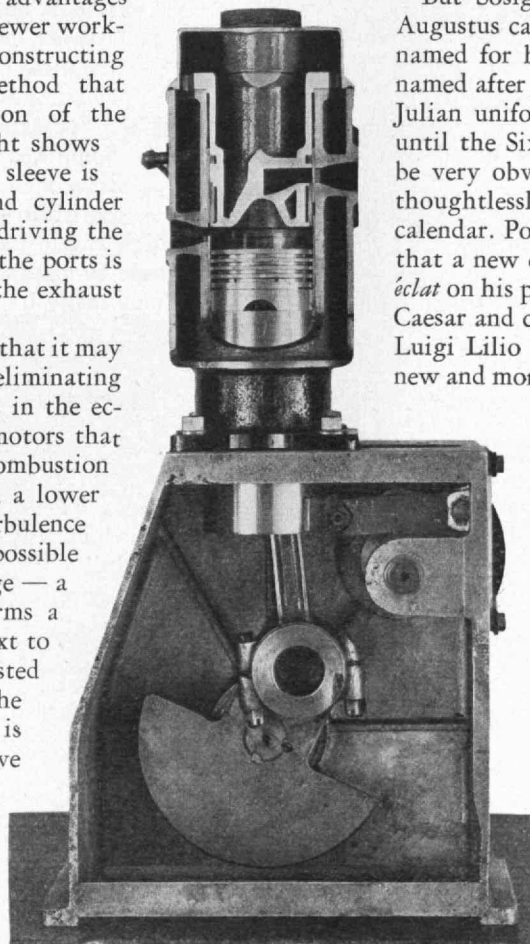
## *Calendar Reform*

**W**HEN Julius Caesar observed that the pontiffs of his day persisted in tinkering with the calendar to suit their own political ends, he probably uttered the Latin equivalent of boloney and called in an expert to readjust the divisions of the calendar into a system more systematic and fool-proof. With the expert Sosigenes, he fixed the mean length of the year at  $365\frac{1}{4}$  days and then divided it into months of thirty, thirty-one, and twenty-nine days. This arrangement, called the Julian, became effective on January 1 of the forty-sixth year before the opening of the Christian era.

But Sosigenes had miscalculated and then Augustus came along to insist that the month named for him should be as long as the one named after Julius, thus partially upsetting the Julian uniformity. The matter dragged along until the Sixteenth Century when it began to be very obvious that the vernal equinox was thoughtlessly ignoring the date set for it in the calendar. Pope Gregory XII, keenly perceiving that a new calendar would be likely to confer *éclat* on his pontificate, followed the example of Caesar and called in an expert, in this instance Luigi Lilio Gheraldi, of Naples, to prepare a new and more accurate calendar. The result was

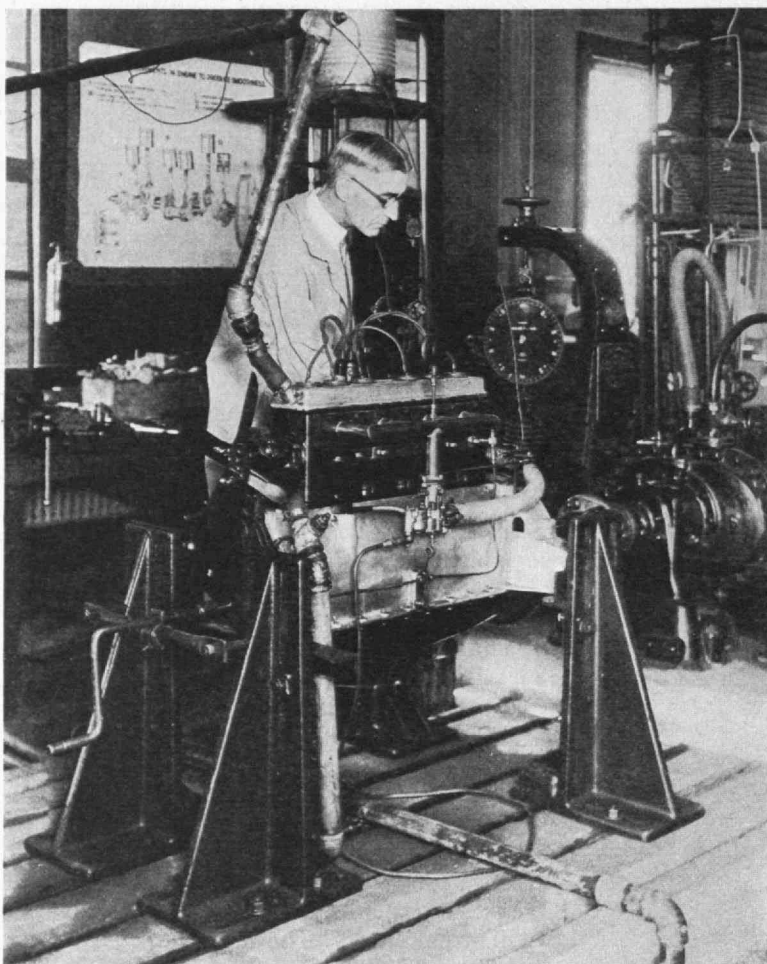
the Gregorian Calendar which we know and use today. It became operative in Christian countries in 1582, and until the immediate present only one serious attempt has been made to change it and that was the abortive effort made by the French revolutionists in 1793.

Now another reform movement arises, predicated not on the inaccuracy of the Gregorian arrangement but on the variable length of its months. A national committee on calendar simplification has been formed and its chairman is George Eastman, Life Member of the Corporation, and long an advocate of calendar reform. Other members are Dr. George K. Burgess, '96, and Gerard Swope, '95.



CUTAWAY SECTION OF THE NEW GAW SINGLE SLEEVE MOTOR ANNOUNCED BY THE REVIEW ON THIS PAGE





MR. GAW EXAMINES HIS NEW SLEEVE VALVE MOTOR ON A TEST BLOCK IN THE INSTITUTE'S AUTOMOTIVE ENGINEERING LABORATORY

The committee expects to decide between two forms of simplification. The first proposes thirteen weeks in each quarter year with two thirty-day months and one thirty-one-day month in each quarter. The second is for thirteen equal months, each consisting of four complete weeks, the thirteenth month to be formed by uniting the last weeks of June with the first two weeks of July to form the new month of Sol. Either method will provide a year of 364 days. It has been suggested that to take care of the 365th day the last day of the year be called Year Day and treated as an international holiday. The extra day which accumulates in four years would be appended to June and referred to as Leap Day.

Four advantages which are set down for both of these systems are: the same day from year to year would recur on the same day of the week; yearly, half-yearly and quarterly events could be permanently fixed on recurring dates in advance; the year's fifty-two weeks would be twenty-six in each half and thirteen in each quarter; appreciable economy would be gained in printing and circulating calendars.

For the thirteen months proposal the following advantages are advanced: all months would be equal, having the same recurring twenty-eight days. The day of the week would always indicate the monthly date. Both day and date would be recorded on both clocks and watches. A complete week would exactly quarter all months,

gearing weekly wages to monthly rents and accounts. Pay days, fixed meetings, and so on, would recur on the same monthly dates and the same weekly days. Accounts and drafts would never come due on Sundays. Permanent monthly dates for public business, school and holidays would be established. All periods of earning and spending would be either equal to or exact multiples of each other. Each month-end would coincide with the week-end. It would release us from the fifth weekly payment for rents, wages, and so on, in unequal months. It would enable us to know instantly the number of days between any two dates in computations of interest, salary, and so on.

### *Chemistry in the World's Work*

FOUNDED half a century ago, the American Chemical Society has grown into a huge body of 16,300 members, and on September 10, 2,500 of these gathered in Swampscott for the Society's Seventy-Sixth Meeting.

Notable among the announcements that were made was that of Dr. Charles H. Herty, a former President of the Society, who, in speaking before the Division of Medical Chemistry, said that establishment by Congress of a National Institute of Health was practically assured. Such an institute, he added, would mobilize philanthropy and science as a world clearing house for an attack on disease.

Speaking on "The Industrial Significance of Some Recent Developments in Organic Chemistry," Dr. Arthur D. Little, '85, described the possibilities of producing a non-asphyxiating gas which would have greatly enhanced heating power and would be virtually smokeless.

"It may easily happen," he said, "that we shall convert water gas to methane and thereby permit the gas industry to distribute a non-asphyxiating gas of such enhanced heating power as to double the energy-carrying capacity of the distribution system." He spoke also of the use of ethylene to ripen fruits artificially. This process, he believes, can be successfully used for various vegetables and fruits, and he held out the hope that in the future "melons will look more like melons and taste less like squash."

A new theoretical conception of the structure of rubber was announced in a paper on "Rubber Structure Research and Its Bearing on the Elastic Qualities of Colloids in General," read by Dr. Ernst A. Hauser, non-resident Associate Professor of Colloid Chemistry in the Department of Chemical Engineering, and international authority on rubber. His new theory conceives the particles forming raw rubber as being in the form of coiled springs and, while this theory requires further study for confirmation, Dr. Hauser spoke of it as the foundation for an entirely new conception of elastic matter.

Lime in salty water will prevent the corrosion of iron or steel structures that may be exposed to it, it was revealed in a paper by Henry L. Forrest, '20, Assistant Professor of Chemical Engineering; Joseph K. Roberts, '28,

Research Associate; and Bruno E. Roetheli, '25, Research Assistant. "Where there are bicarbonates, or salts containing the metal calcium, in the water, the lime causes a layer of protective scales of calcium carbonate on the iron. Where there is magnesium in the water, soda ash must also be added. The formation of the protective scale is hastened if the water is made somewhat acid."

Tenney L. Davis, '13, Associate Professor of Organic Chemistry, and Secretary of the Division of History of Chemistry, read a paper on "Eliot and Storer — Pioneers in the Laboratory Teaching of Chemistry." In the Division of Physical and Inorganic Chemistry, Miles S. Sherrill, '99, Professor of Theoretical Chemistry, presented a paper on "The Problem Method of Teaching Physical Chemistry." Per K. Frölich, '23, Assistant Professor of Chemical Engineering; Philip S. Taylor, '28; Charles A. Southwick, Jr., '28; Merrell R. Fenske, and Robert L. Davidson were the authors of two papers presented before the Division of Industrial and Engineering Chemistry, while George Scatchard, Associate Professor of Physical Chemistry, read a paper before the Division of Physical and Inorganic Chemistry.

The arrangements for the meeting were in charge of a committee of which James F. Norris, Professor of Organic Chemistry, was honorary chairman, and Dr. Ernest H. Huntress, '20, Executive Secretary. Dr. Allan W. Rowe, '01, was chairman of the entertainment committee; John M. Bierer, '10, headed the finance committee and Raymond S. Stevens, '17, the hotels committee. Robert S. Weston, '94, John A. Seaverns, '84, and Charles R. Boggs, '05, were also members of the general committee.

### Wood Engineering

WOOD, because of its present importance and undeveloped possibilities in industry, demands the attention of the educator as well as the scientist and the engineer, President Samuel W. Stratton told members of

the Wood Industries Division of the American Society of Mechanical Engineers at the New England Industries Meeting in Boston on October 1-3. The wood-working industry should be given more attention in the field of education, Dr. Stratton said, adding that establishment of a course in wood engineering at Technology is under consideration.

Opening the informal discussion in a session at which Dr. Arthur D. Little, '85, presided, Dr. Stratton directed attention to the problem of preserving wood after it has been worked for protection against insects and decay. Examination of timbers taken from ancient cathedrals in Europe, he said, impressed upon him the need for processes to prevent decay.

The expansion and contraction of wood by moisture was another problem which he deemed worthy of study to make wood fibre moisture-proof. The fact that present methods of fireproofing wood seem expensive should not be an obstacle to further research to develop new and less expensive processes which would greatly increase the value of wood for many purposes, he said. Wood finishes were discussed and Dr. Stratton urged consideration of the possibilities for developing new finishes. He then turned to wood-working machinery, which he believes can and will be greatly improved in the future. Then



P. W. LITCHFIELD, '96 (LEFT), AND J. C. HUNSAKER, S. M. '12 (THIRD FROM LEFT), BOTH OF THE GOODYEAR-ZEPPELIN CORPORATION, WATCH MISS LITCHFIELD CHRISTEN "THE PURITAN," THE NEXT-TO-THE-SMALLEST LIGHTER-THAN-AIR SHIP





GEORGE EASTMAN, LIFE MEMBER OF THE CORPORATION AND ADVOCATE OF A REVISED CALENDAR, HAS RECENTLY RETURNED FROM A HUNTING TRIP INTO AFRICA

there was the matter of finding new uses for wood, and again the opportunities for education. There will be wood engineers just as there are civil and mechanical, metal and glass engineers now, he told his audience.

Dr. Little referred to recent developments in synthetic wood, now a reality, mentioning the use of sugar cane in the manufacture of a substitute for lumber. Wood is being mixed with cement to produce another substitute, he said, and called attention to the reclamation of yellow pine stumps which are now recognized as a valuable source of turpentine and rosin. The supply is worthy of operations on a large scale, while the removal of the stumps makes new land available for agriculture.

He spoke, too, of interesting experiments in Maine and California in which dyes are injected into living trees to produce lumber of various colors. Injection of chemicals, he thought, presented a promising field for study to prevent the ravages of insects in our forests and processes for stimulating fruit might also be developed by this method.

### *Americana*

WILLIAMSBURG, founded in 1632, in 1699 succeeded Jamestown as the capital of the Colony of Virginia and with small economic development and practically no growth of population Williamsburg remains much the same as it was in the times of Queen Anne and the Georges. Duke of Gloucester Street is now electrically lighted and the inhabitants ride in automobiles instead of horse-drawn coaches, but if it were not for the College of William and Mary this quiet Virginia town would today excite little public interest. For William and Mary was the Alma Mater of Washington, Jefferson, Monroe, Tyler, Marshall, Randolph, and William Barton Rogers and, next to Harvard, is the oldest college in the United States.

John D. Rockefeller, Jr., however, has agreed to pay the cost, estimated at between \$4,000,000 and \$5,000,000, of restoring Williamsburg as it was in Colonial days and

the work has begun under the direction of the architectural firm of Perry, Shaw and Hepburn with Arthur A. Shurtleff, '94, as landscape architect. Two of the architects are Technology men,—William G. Perry, '07, and Andrew H. Hepburn, '03.

The idea of preserving Williamsburg as a shrine city of early Americana was conceived twenty-five years ago by Dr. W. A. R. Goodwin of the Faculty of William and Mary. Mr. Rockefeller became interested two years ago this month while attending the Sesquicentennial Celebration of Phi Beta Kappa, which was founded at William and Mary, and which held its early meetings in the Apollo Room of the Raleigh Tavern.

During some months prior to the beginning of actual restoration over \$1,600,000 was spent acquiring old buildings for preservation and newer ones to be torn down. Under present plans

the elements which belong to the last century and a half are to be cleared from the scene. More than forty public and private buildings, which stand there now, were standing before the Revolution, including the Bruton Church and the old prison, built in 1701 and famous for the hangings of historic pirates which it witnessed. The House of Burgesses where Patrick Henry made his historic outburst is to rise again from its fire-blackened ruins. A high school, a hotel and several other buildings are to be demolished so that the governor's palace may be rebuilt on its old site and nearby America's first theatre, originally built in 1716, is to reappear.

### *Arbitrator*

DAVIS R. DEWEY, Head of the Department of Economics and Statistics, for the second time within a year has been appointed by President Coolidge to membership on a special board of investigation to study wage questions on western railroads.

Last May when employees of the Kansas City, Mexico and Orient Railroad threatened to strike to enforce demands for an increase in wages, a board of which Dr. Dewey was a member, investigated the dispute and made a report in which it was found that the railroad company was not justified in paying the increase demanded by the employees. It was recommended that they accept an offer made by the railroad or submit their differences to arbitration under the Railroad Labor Act.

Dr. Dewey is a member of the emergency board now investigating the wage dispute between 70,000 railway conductors and trainmen and forty-seven western trunk lines and subsidiaries. In his proclamation creating the emergency board, President Coolidge referred to the possibility of interruption of transportation service through the effect of the dispute. Attempts to bring a settlement through the Federal Board of Mediation have failed.

The emergency board began its study of the situation in Chicago on October 2, and has thirty days to complete the investigation and make its report to the President.





# INSTITUTE AFFAIRS



## *New Laboratory*

**M**ORE extensive research and instructional facilities in the field of internal combustion engines will be available at the Institute upon completion of the new engine laboratory, construction of which began on October 9. The new building, located directly behind the main buildings and adjacent to the new Guggenheim Aeronautical Laboratory, is a one-story structure 175 feet long and 80 feet wide, and the first of a series of alternate one- and four-story units. Steel and buff-colored brick construction is to be used to harmonize with the general architectural scheme of the surrounding buildings.

Upon completion the new building will receive much of the equipment of the automotive engine laboratory now housed in temporary quarters, together with other pieces of apparatus which because of lack of space are now scattered about various parts of the mechanical engineering laboratories. Among these latter are included several demonstration chassis of stock automobiles, a recently acquired Cowdry brake tester, and a treadmill dynamometer.

Another section of the new building will be given over to the constantly growing aeronautical engine research. Much valuable equipment for this work which is now being carried on in temporary quarters will be permanently relocated in the new laboratory.

## *Registration*

**F**OR the second successive year the registration has increased. As of the third day of this academic year there was a total of 2,818 students as compared with 2,672 on the third day of 1927-28, a gain of 146 or nearly 5.5 per cent. The freshman class shows an increase of 82 or 13.8 per cent and these 82, together with 41 more sophomores, 10 more seniors, 26 more graduate students and 16 more unclassified students, offset a decrease of 29 juniors, leaving the favorable balance of 146.

As was the case a year ago Aeronautical Engineering shows the greatest gain of any Course. It now has 224 students of whom 94 are freshmen. More of the new Class of 1932 have cast a preliminary ballot for Aeronautical Engineering than for any other Course except Electrical Engineering (on which 116 men have set their hearts) in spite of the announced policy that but 30 will be allowed to become sophomores in Aeronautical Engineering next year.

Electrical Engineering is still the largest of the Institute's courses although showing a drop of 41 to 511 and Engineering Administration with 301 or 5 less than in 1927-28 is still second. Mechanical Engineering has lost 17 but retains third position with 285, Chemical Engineering has gained 18 and retains fourth with 314. Civil Engineering has gained 20 and retains fifth with 252. Last year Architecture was sixth with 179, but this year's total of 208 makes it less than Aeronautical Engineering which has 224 and which is now sixth.

## *The Counting Room*

**F**OR the third consecutive fiscal year the Institute's net operating income exceeded the two million mark according to the Report of the Treasurer, Everett Morss, '85, made to the Corporation on October 10. It is also comforting to note that the general funds of the Institute increased over \$400,000 during 1927-28 and that on June 30 last they stood on the books at \$29,818,373.68, a stupendous total. The yield was "a net income of 5.55 per cent plus a small balance which has been carried to the Endowment

Reserve Fund. This protective fund is now \$592,000, or about 2 per cent of the total of all investments held by the Institute." This per cent figure for net income is lower if it is computed on the basis of the market value of the Institute's securities, instead of on the

book value. The market value as of June 30 was some \$5,338,000 greater, giving a resultant income of 4.7 per cent.

Gross expense for 1927-28 exceeded gross income by \$62,000 and net expense exceeded net income by \$13,600. Income from students was \$897,262.04, or \$2,328

more than in 1926-27. The net operating expense of the Institute during 1927-28 was at the rate of \$6,300 per day (not including \$2,190 per day for research and payments for special purposes) as against \$6,200, \$6,000 and \$5,444 in the three previous years.

Academic expenses increased \$70,600 or 5.1 per cent over 1926-27. They were \$1,445,303.62 and the income from students counterbalanced but 62 per cent of this item. Administration costs increased \$11,000 or 4.3 per cent; plant operation and maintenance increased \$336 or 0.8 per cent; miscellaneous expenses decreased \$5,000 or 4.1 per cent; special appropriations decreased \$29,000 or 27.5 per cent.



ERNST A. HAUSER,  
NON-RESIDENT  
ASSOCIATE PROFESSOR  
OF COLLOID CHEMIS-  
TRY, DEMONSTRATES  
THE MOLECULAR  
STRUCTURE OF RUB-  
BER. (SEE PAGE 25)

Prorated among the 2,712 students in residence as of November 1, 1927, the time of the official count, the net operating expense was \$851 apiece or \$4 more than the 1926-27 per capita, \$82 more than that of 1925-26, \$175 more than that of 1924-25. For 1927-28 academic expense came to \$534 per student, administrative expense to \$96, plant operation to \$150, the corresponding figures for 1926-27 being \$514, \$94, and \$153, respectively, and for 1925-26 being \$472, \$91, and \$132, respectively.

### *Staff Changes*

CHANGES in the Faculty confirmed by the Corporation since June include the appointment of Dr. Carl-Gustaf A. Rossby as Associate Professor of Meteorology. He comes to the Institute to give an advanced course in meteorology, which will include studies of weather forecasting for aviation. Among his students are six United States Naval officers who are specializing in meteorology.

Dr. Rossby is a native of Sweden, and has been a member of several important expeditions, including the Conrad Holmboe expedition to Jan Mayen and Greenland in 1923. Recently he has been chairman of the committee on aeronautical meteorology of the Daniel Guggenheim Fund for the Promotion of Aeronautics. Earlier he represented the same organization as research associate in meteorology attached to the United States Weather Bureau. Dr. Rossby has made important contributions to the knowledge of meteorology in its application to aerial navigation.

Promotions include that of Joseph S. Newell, '19, from Instructor to Assistant Professor of Structural Engineering in the Department of Civil and Sanitary Engineering. A new appointment is that of Fairfield E. Raymond, '21 (A.B., Harvard, '18), as Assistant Professor of Industrial Research in the Department of Economics and Statistics. He comes to Technology from the Crosby Steam Gage and Valve Company.

Termination of the regulation terms of service of several officers in the Department of Military Science and Tactics was the reason for four replacement appointments.

Major Richard H. Somers, Ordnance Department, takes the place of Major Cleveland H. Bandholtz; Captain Crawford McM. Kellogg, Chemical Warfare Service, takes the place of Captain Thomas Phillips; Captain George S. Eyster, Signal Corps, takes the place of Captain Harold L. Milan; and Captain Vernon Hall, Coast Artillery Corps, takes the place of Captain Geoffrey M. O'Connell. All are Assistant Professors of Military Science and Tactics.

### *Summer Session Innovations*

INTRODUCTION of two new courses, one a conference on methods of teaching physics and the other an advanced course in applied colloid chemistry, gave the past Summer Session unusual interest and broadened its scope beyond that of any previous year. The total registration of this year's session, however, was 1450, or slightly under that of 1927.

The conference on physics was held under the auspices of the Society for the Promotion of Engineering Education and was attended by teachers of physics from thirty-one schools and colleges. President Samuel W. Stratton was director of the conference; Harry P. Hammond, Associate Director of the Society for the Promotion of Engineering Education, represented the society; and Walter Fenno Dearborn, Professor of Education at Harvard University, was educational advisor.

Methods of teaching physics to engineering students were discussed in detail with the object of bringing about a better relationship between physics and the engineering subjects, as well as improvement in the methods of teaching physics. The discussion included classroom and laboratory procedure, examinations and the selection of fundamental parts of subjects for instruction.

Teachers of physics who spoke at the conference, which opened on July 9, and closed with a dinner on July 28, included Professors William J. Drisko, '95, William S. Franklin, and Louis H. Young, '15, of the Institute Faculty. Members of the Faculty from other Departments who lectured were Vannevar Bush, Eng.D. '16, Professor



TEACHERS OF COLLEGE PHYSICS WHO ATTENDED THE CONFERENCE ON PHYSICS HELD AT THE INSTITUTE THIS PAST SUMMER UNDER THE AUSPICES OF THE SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION





AERIAL VIEW OF TECHNOLOGY SHOWING THE NEW GUGGENHEIM AERONAUTICAL LABORATORY AT THE EXTREME LEFT AND LAST SUMMER'S LANDSCAPING IN THE GREAT COURT

of Electric Power Transmission, and Charles H. Chatfield, '14, Associate Professor of Aeronautics.

The summer course in applied colloid chemistry, given by Ernst A. Hauser, non-resident Associate Professor of Colloid Chemistry, drew students from the laboratories of many leading industries, including electrical, rubber, chemical, oil, explosive, paper, textile, paint, and research organizations.

Planned as a course for "experts," and assuming a thorough knowledge of general, physical and organic chemistry, Professor Hauser's classes were particularly valuable to technical workers already engaged in the colloid and amorphous industries, to advanced graduate and undergraduate students who desired mastery of the field, and to science teachers who sought knowledge of recent developments.

Speaking of the course, which was given in the Department of Chemical Engineering, of which he is in charge, Professor Warren K. Lewis, '05, said that "when a new field of science is developing with extreme rapidity as is this one, there is always grave difficulty in keeping classroom instruction up to the development of the science. The experts who alone are adequately informed as to this development are too busy at their research work to teach, and the teacher lacking contact with the research of the expert, does not have the latest information. It always takes a period of years to complete the overcoming of this handicap.

"The major purpose of the course was to lessen the

time that intervenes in this country between developments in this exceedingly important field and technical training in our higher institutions of learning. We secured Dr. Hauser, a man who is probably the outstanding expert in the world in the field of colloid and amorphous industries. He has done more than any other individual to show the nature and structure of rubber; his scientific work has done more than that of anyone else to make it possible for us today to exploit the potentialities of industrial utilization of rubber latex. He is recognized by rubber chemists throughout the world as leading expert in their special field."

### *Howard Elliott: 1860-1928*

DURING the summer, death removed a Life Member of the Corporation, Howard Elliott, who passed away at Dennis on Cape Cod, July 8. His election to the Corporation took place March 10, 1915, at which time he was President of the New York, New Haven and Hartford Railroad.

Twenty-one years after his graduation from the Lawrence Scientific School in 1881 Mr. Elliott, who started railroading as a rodman in a surveying crew, had climbed to the Presidency of the Northern Pacific Railway. His career began with the Burlington System at the age of twenty, from 1896 to 1902 he was its General Manager and in the latter year he attained the Second Vice-Presidency. It was from this post that the late



James J. Hill brought him in 1903 to the President's chair of the Northern Pacific which he filled for ten years.

In 1913 when the New Haven's physical and financial ills became embarrassing, its directors called Mr. Elliott and made him President and Chairman of the Board. Public confidence in the road was soon re-established, its financial crisis averted, and credit for the accomplishment was given largely to Howard Elliott. A nervous breakdown compelled his resignation from the New Haven in 1917, but he took an active part in the government's administration of the railroads during the War and in 1920 he went back to the Northern Pacific Railroad as the Chairman of the Board.

Mr. Elliott served three terms as an Overseer of Harvard University, was President of the Board of Overseers in 1925, and President of the Harvard Alumni Association in 1917.

### *Municipal Survey*

THE report of an Industrial Survey of Metropolitan Providence, prepared by the Institute's Division of Municipal and Industrial Research, has been published after a comprehensive study started by Professor William A. Bassett, Director of the Division, and his staff, early last year. The report, the first to be completed by the new Division, covers a general statement of conditions in the territory, followed by a detailed inventory and report upon the leading local lines of manufacture, and a distribution census based upon a report by the United States Census Bureau made in cooperation with the Industrial Survey. In addition there is included a discussion of transportation facilities, public utility service, use of power and fuel, labor, cost of living, housing accommodations, banking institutions, insurance facilities and governmental financial policies.

Attention is directed to many conditions within the metropolitan area distinctly favorable to the further advancement of industry. Among these are its excellent, though somewhat undeveloped, port facilities; overnight deliveries to and from New York by boat; adequate rail transportation facilities, though these, too, are said to be capable of further development and improvement; ample water supply; good public utility service; reasonably adequate public works; ample banking facilities; excellent schools and exceptional facilities for outdoor recreation available to every resident. It also points out that a favorable diversity of industry exists, and calls attention to one of its most favorable factors, namely, an abundant supply of skilled and contented labor. Particular attention is directed to the noteworthy absence of labor disturbances in the district.

Among the factors which the report considers to be unfavorable to fullest development of Metropolitan Providence, and the improvement of which are recommended, are the lack of compelling railroad competition; insufficient development of port facilities and water transportation; high cost of domestic foodstuffs, resulting largely from inefficiency in commodity distribution due principally to market congestion; and lack of suitable medium-priced housing accommodations. Also, attention is called to certain economic difficulties at present existing in some of the leading local industries, notably the textile and jewelry industries. An effort to interest new industries to

secure a greater diversification is recommended.

### *New Honor*

AS The Review goes to press word comes that the rank of Officer in the Legion of Honor was conferred upon President Samuel W. Stratton by the French Government, appropriately enough, at a meeting of the Faculty on October 17.

Presentation of the honor, which came as a promotion from Chevalier, conferred in 1909, was made by J. C. Joseph Flammand, French Consul at Boston. Speaking in the name of the French Republic, Mr. Flammand said that the promotion from Chevalier to Officer in the Legion of Honor was conferred in recognition of Dr. Stratton's great services to science and to mankind. He spoke of Dr. Stratton's long service in the government, and

especially of his work as founder and first director of the United States Bureau of Standards.

It was Napoleon who founded the Legion of Honor in 1802, as an order of merit for the purpose of recognizing exploits and services in the civil and military departments of France. Napoleon was first grand master of the Legion of Honor. Later the scope of the order was broadened to enable it to confer honors in recognition of unusual services performed by the subjects of other nations.

Other Technology men who are officers of the Legion are Herbert H. Adams, '99, one time chief of the Military Railways in the Zone of the Armies; and William B. Poland, '90, one time Director for the Relief of the Invaded Regions of France and Belgium and at present Technical Advisor to the Persian Government.

Two other members of the Faculty are Chevaliers of the Legion: Dugald C. Jackson, Head of the Department of Electrical Engineering, who was a Lt. Col. of the U. S. Engineers during the World War; and William Emerson, now Head of the Department of Architecture, and a Major of the Red Cross during the war.





## BOOKS



Weather • • Industrial Chemistry • • Alaska

### *A Chemist Looks at Life*

THE HANDWRITING ON THE WALL, by Arthur D. Little, '85. \$2.50. 287 pages. Boston: *Little, Brown, and Company*.

**T**HIS book is a collection of twelve essays, written "at various times for occasional purposes," unified by a common focus of interest, and now brought together in a single volume. It discusses the most outstanding of all of the signs of the times. The handwriting on the wall is research. The indebtedness of industry to chemistry is here shown by hundreds of examples and illustrated by relevant, and generally amazing, statistics. The whole is wittily set forth. The book has many a chuckle in it.

The book will interest manufacturers and students of economics. It will be of real assistance to teachers of elementary chemistry who wish to be better informed on the applications of chemistry to daily life. It will supply entertaining reading to the intelligent looker-on at current events — and will widen his horizon. Scientific research produces dollars. It is to be wished that Dr. Little had told us more fully what produces scientific research.

The book contains many passages that are amusing and quotable. To illustrate Misapplied Chemistry, the author tells the story of the East Side New Yorker who inquired of his friend, "Who was that new woman I seen you with on the Avenue Sunday?" and received the reply, "That wasn't a new woman. That was my old woman, repainted." And again—"Benjamin Franklin was not perhaps in all respects a paragon, but he was unquestionably a polygon—a plain figure of many sides and angles." One recalls the story of James MacNeil Whistler and Oscar Wilde, walking home together after a soirée. Whistler had made an especially witty remark. Wilde complimented him for it, and said that he wished that he had made the remark himself. "Never mind, Oscar, you will!" answered Whistler. And so, Gentle Readers of Dr. Little's book—for I believe that you will be many—never mind, in all probability you will!

TENNEY L. DAVIS, '13

### *Meteorologica*

METEOROLOGY, by David Brunt. \$1.00. 112 pages. New York: *Oxford University Press*.

**M**ARK TWAIN'S flippancy that everybody talks about the weather, but nobody seems to do anything about it, was unfair to the men who have built up the science of meteorology. Mr. Brunt, who is superintendent of the British Army Meteorological Services, has in this volume reviewed the development of knowledge about the weather and summarized present-day theories. Since Torricelli invented the barometer, a vast and accurate amount of observation has been made of winds, temperature, and pressures over the earth's

surface. The coming of aviation now demands that information be gathered of conditions in the upper air. The new professorship in meteorology in the Department of Aeronautical Engineering falls in line with this.

That those who run may read — and understand — the author has presented his material simply and lucidly, and the inquiring reader may come out of the book with some idea of the atmosphere and its physical properties, of its general circulation, of solar radiation and cyclonic depressions, and of the meteorologist's method of recording data on these things. One omission should be noted — no mention is made of the work of Dr. Charles G. Abbot, '94, and his associates of the Smithsonian Institution on the effects of solar radiation and the methods of long-range forecasting based upon the fluctuation of the solar constant. (See The Review for January and March, 1928.) The book contains six remarkable photographs of lightning flashes and cloud formations, together with thirteen diagrams. In format and typography it maintains the high standards of the Oxford University Press.

### *Seward's Ice Box*

A DOG-PUNCHER ON THE YUKON, by Arthur T. Walden. \$3.50. xviii+289 pages. Boston: *Houghton Mifflin Company*.

ADVENTURES IN ALASKA AND ALONG THE TRAIL, by Wendell Endicott. xvi+244 pages. New York: *Frederick A. Stokes Company*.

GENTLEMEN UNAFRAID, by Barrett Willoughby. \$3.50. xiii+285 pages. New York: *G. P. Putnam's Sons*.

**I**N the dying days of the administration of Andrew Johnson, his Secretary of State, William H. Seward, concluded the purchase of Alaska from the Czar of Russia for the sum of \$7,200,000. Neither Johnson nor Seward lived long enough to witness the justification of their faith that "Seward's Ice-box" the "land of the polar bear and the gold pan" would turn out to be the productive treasury of furs and minerals which it was and is. To have imagined the repletion of literature, romantic and otherwise, that would be incited by the vast area they acquired would have called for more foresight than either Johnson or Seward possessed. Alaska's present total population is about the same as that of Lincoln, Neb., or of Haverhill, Mass., less than one to every ten square miles; yet in all probability enough books have been written on the country to supply a different one to each and every inhabitant.

The three leaders of the late 1928 crop are the subjects of this review. Their authors are: first, the man now in charge of the sledge dogs of the Byrd Antarctic Expedition who began "dog-punching" on the Yukon two years before the Klondike gold rush of 1898 when Circle City was the center and Birch Creek Mines the magnet; second, a sportsman and traveler who has hunted grizzlies, goats,



and caribou in Alaska and also has something of a reputation for fishing along the Florida Keys; third, a lady, long resident of Alaska, who deserves inclusion in her own volume as a "gentleman unafraid" despite her sex.

Mr. Walden deflates the romance from the gold camps of 1898 for he visited many and found them to be places of silence rather than "roaring" communities. Dogs howled occasionally in summer, steamboats whistled weeks apart, and in winter "everything was hushed by the snow." Before the rush over Chilkoot Pass brought laws to be defied or evaded, life was simple along the Arctic Circle. Justice cost nothing, the Golden Rule was observed, and people minded their own business. A duel was prevented by calling a miners' meeting which voted that if the affair took place the victim should be buried and the victor hanged with the further provision that "if either man is found dead under suspicious circumstances, the other shall be hanged without trial."

Mr. Endicott recounts his own adventures on a game hunting expedition up the Tanana River and stories of the country related to him by others over camp fires. For good measure he includes some material on his trail experiences in the Canadian Rockies, his fishing in Florida and North Carolina, and his visit to the "Round-up" at Pendleton, Ore. The book is beautifully printed on plated paper and contains 150 superb illustrations from photographs he took.

The careers of five individuals are sketched in "Gentlemen Unafraid," the first chapter of which tells of the author's early life aboard her father's trading schooner *Tyee* and how she came to her present home at Katalla, "on the shores of the wildest stretch of the North Pacific." Her subjects are: Alexander Malcolm Smith, "trail-blazer;" Scotty Allan, thrice winner of the All-Alaska Sweepstakes and the man who made the Nome Dog internationally famous; George Watkin Evans, consulting mining engineer for the U. S. Bureau of Mines; Captain Sydney Barrington, champion swift-water skipper of the North, a pilot who for six consecutive seasons was first to warp his steamer to the Dawson dock; Dr. C. C. Georgeson, the "plant wizard of Alaska."

Each of these books has merit. Mr. Endicott's ranks No. 1 from the pictorial standpoint and the well-told lives of Miss Willoughby's heroes, particularly those of Mr. Evans and Dr. Georgeson, are worth several rereadings. As an account of what Alaska was a generation ago, Mr. Walden's story interspersed with his salty anecdotes is most absorbing. He manages to convey an idea of the gamblers who staked their lives against the elements and their fortunes against each other, of the staging of "Uncle Tom's Cabin" with malamute puppies for bloodhounds, of the "grand openings" of new saloons, of the intense Alaskan summers of continued daylight when people slept and ate when they felt like it and often breakfasted at 10 P.M., of the bleak winters when no dog drivers dared drink whiskey, of the inhabitants of a half-world who were more charitable to down-and-outers than were many "good" people, of the efficient work of the Northwest Mounted Police in Yukon Territory as contrasted with conditions on our own side of the line, of a poker game during a food scarcity at Nome with dried beans used in place of chips and in which the visitors won all the beans!

## Beaux Arts

WINNING DESIGNS: 1904-1927 PARIS PRIZE IN ARCHITECTURE, by the Society of Beaux Arts Architects, with an introduction by John F. Harbeson. Folio, 35 plates. New York: Pencil Points Press, Inc.

**T**HIS folio consists of reproductions of the prize-winning drawings in this competition from its inception in 1904 until the year 1927. The story of architectural education in the United States since the founding of the Society of Beaux Arts Architects is well told, by these plates. They are of value to the architect and draughtsman as well as to the student of architecture.

In the reviewer's experience, no such publication has been attempted in America before. It is to be hoped that this will not be the last one. Writing as a recent undergraduate, I can vouch for the need of reproductions of the Paris Prize drawings in folio form and also the other premier student work from year to year, similar to the publications of the work at the *École des Beaux Arts* in Paris. The Grand Prix Folio plates are larger and somewhat better reproduced than are these American ones.

The list of names of those who have attained the highest academic honor in American architecture is in itself impressive. Of interest to Technology men is the fact that Frederic C. Hiron, '03, won the prize in 1906, and Donald S. Nelson, '26, in 1927. The former is a prominent New York City architect who is still interested in architectural education. He proves it by conducting his own *atelier*. Donald Nelson at present is in Paris studying at the *École*. While at Technology he was a pupil of Jacques Carlu, the *Maestro* of the Department of Architecture.

ROBERT E. JENKS, S. M. '28

## Reviews in Brief

MURDER, by Evelyn Johnson and Gretta Palmer. \$1.90. 277 pages. New York: Covici, Friede Inc.

**S**ALIENT details of thirty-two crimes up to the who-did-it point. For readers undesirous of racking their brains for answers (which probably would be incorrect anyhow) plausible solutions are provided in a plain, sealed envelope inside the back cover. This book may convert a half dozen or so skeptics who believe mystery story plots are easily constructed and that all detective fiction is trash.

THE ENGINEER: HIS WORK AND HIS EDUCATION, by Robert L. Sackett. \$1.40. 193 pages. Boston: Ginn and Company.

THE ELEMENTS OF INDUSTRIAL ENGINEERING, by George H. Shepard. \$4.80. 541 pages. Boston: Ginn and Company.

**B**OTH of these volumes are from a series of textbooks edited by the Dean of the Schools of Engineering at Purdue University, Andrey A. Potter, '03; and both have been published in the same format as one of the series which the American Institute of Graphic Arts listed in its 1928 exhibition, "Fifty Books of the Year."

The first is a vocational guide for those who are entering or about to enter upon preparation for the engineering profession. A chapter is devoted to each of the major branches of engineering, and an appendix gives a brief biographical sketch of twelve famous engineers

(Concluded on page 66)





## *The Grab Bag*

To the Class of '68 goes the laurels for the oldest Class having a reunion this June. It is also unique because it had only one member of the Class at its banquet. This was the loyal Secretary, Robert H. Richards. Other accounts of five-year reunions appear in the notes of '83, '88, '98, '03, '08, and '18. In addition the Classes of '02, '04, and '20 held their annual reunions at this time. Those that picked the week-end of June 15-17 had perfect weather, but we understand that it rained at other times during the month. To '18 goes the distinction of having the only dog at its reunion. We have not yet ascertained its course. This Class has other claims for distinction, more of which later.

The Class of '90 mentions quite proudly several sons who are taking after their fathers, although they are not attending Technology, while '94 tells of sons at Technology who will soon be just as famous. — Professor Locke, '96 Secretary, who is always generously providing material for other secretaries, has his usual full and interesting notes. He speaks of classmates in Ketchikan and Nicaragua with equal ease; and his notes contain accounts of exciting times in Nicaragua, mistaken identity in Halifax, subway explosions in Boston, and taxi rides in Paris.

It will be well worth while to turn to the notes for the Class of '99. Arthur Hamilton's diary, continued from the May Review, enlarges upon his friendship with Hilda, the big game hunter. Hilda faces a captain, a postmaster general, or an African lion with a facility which is more than a little disconcerting to the author. He has cause for complaint in his traveling companion, Tommy, who is evidently not a good sailor.

Whippet racing is the new sport developed in the '00 notes. — Dr. Rowe, Secretary of '01, has received a complaint, and he is seeking opinion on it. — The '03 Reunion (one of the rainy ones) established a precedent by giving the ladies of the party Danbury hats, soft as puppie's

ears, in the delicate tints most suitable to the complexion of the wearers. That must have called for diplomacy rarely equalled. — Men from '04 seem to be widely scattered. News comes in from Seattle, England, India, Mexico City, and the groves of Florida. — "Bossy" Gillis, the bad boy of Newburyport, convicted an '05 man for speeding in retaliation for serving a summons on him. Roswell Davis, Secretary for this Class, also gives an interesting account of his part in the sailing race to Bermuda this summer. Long distance sailing on a small boat is only for the hardy sailor, he declares.

The Twentieth Reunion of the Class of '08 seems to have been one of the livelier reunions. How much the often-mentioned pretty waitresses had to do with it is a question, but it is certain that one of the Class fell, lobster and all, for one of them. — The Secretary of '11, who has been Secretary-Treasurer of the Alumni Association for a number of years, has abandoned Technology for the Lamson Company in Syracuse. We picture him a little wistful for the reunions and meetings that he was ever attending. — "Paris," claims a '12 man, "is a great town to come and visit, but it is not so good for a steady diet." — H. B. Richmond, Secretary of '14, passes a neat compliment to '01, and proceeds to offer excellent competition to the limpid style of Dr. Rowe. His notes reach their high point in the discovery of a new occupation of the versatile Porter Adams.

Now comes further information about the '18 Reunion. From inside sources we were able to find out a little more about the fireworks episode, and the consequent scamper down the beach of the only woman Class Secretary. We quote directly from the source: "Who threw the cigarette butt (or whatever it was) into the magazine is unimportant, but the way Gretchen, standing hard by, up anchored and luffed into the wind with all sails set was a sight to behold. Roman candles shot across the line like tracer bullets from a machine

gun. Aerial bombs exploded in the tennis court. The gallery ducked down behind the scanty protection of the piazza rail. Then all was still. The two pyrotechnicians had covered the offending pieces with sand."

The Class of '20 boasts of their police court record. The mention of one victim for speeding may open up an undeveloped field among the other classes. — Marriage announcements are featured in the later classes of '24 and '25. They are full of accounts of auto trips and advice on how to drain iceboxes. — One man in the Class of '26 has time to describe Spanish bullfights, but for one '27 man there is little time even for sleep. Repairing lines for a telephone company is evidently night work of the most exacting and exhausting kind. — We welcome a new class to this section, '28, a class that promises a large assortment of news for the coming year.

The total number of births for the summer months is eleven. Of these three are girls and eight are boys. Four are from the Class of '20, and one each from '12, '15, '17, '18, '21, '25, and '26.

## *Deaths*

Further mention of the following men, recently deceased, may be found in the notes of their respective classes, with the exception of those from the Class of '70:

WILLIAM W. BREWSTER, '70. Died June 6, 1927. As Treasurer of the Plymouth Five Cents Savings Bank he was the most prominent and oldest bank official in the town.

JOSIAH A. OSGOOD, '70. Died December 19, 1927. At the time of his death he was a resident of Sierra Madre, Calif.

OLIVER N. SANFORD, '70. Died March 26, 1928. At the time of his death he was a resident of San Francisco, Calif.

THOMAS T. M. SARGENT, '82. Died October 22, 1927.

J. RANDOLPH COOLIDGE, '92. Died August 8, 1928. Long associated with the firm of Coolidge and Carlson, Ar-

chitects, and prominent in many outside interests.

A. N. HABBERLEY, '94. Died in 1926.

FRED A. DAVENPORT, '95. No date given. At one time Treasurer of the A. H. Davenport Company of Boston.

JESSIE FREMONT EMERY, '95. Died

in January, 1928. For a number of years she had been retired from her life profession of teaching.

STEWART S. BELL, '96. Died September 23, 1928. Followed electrical lines of work, latterly being an independent salesman of electrical appliances.

LESTER W. COOPER, '12. Died September 15, 1928.

PAUL H. TAYLOR, '14. Died on July 24, 1928.

ARTHUR E. WATKINS, '26. No date given.

HUBERT A. VICKERY, JR., '28. Died on May 28, 1928.

**'68** The Class of '68 on its Sixtieth Anniversary was invited by the Corporation and Faculty to take its place on the platform at the graduation of the Class of '28. It was also asked to attend a dinner or lunch to talk over old times. D. M. Wheeler was the only member who was well enough or otherwise able to come. In the procession entering Symphony Hall a considerable space was left for the Faculty, then came the Class of '68 carrying its banner, and then a space before the next body of the procession came along. So the Class of '68 was greatly honored. Wheeler and Richards were the two who carried the banner.

After a series of amusing delays Richards in full robes had his picture taken with Miss Roberta Lovely. Afterwards, up in the robing room, Wheeler remarked, "You are tired and I have a lot of things in town to do before I catch my train. I believe we had better not have the lunch." So Richards started home. He remembered that he had advised Safford not to come on account of his old age infirmities, that Appleton had written he could not come on the same account, that Joe Revere was in Cape Breton, and that Curtis had not said he was coming. When he got home he had just planned for his lunch when he thought he would telephone to the Engineers Club to see if anyone had come, and he received word that Safford and his niece had come in expressly to see him. So Richards telephoned for a taxi and went into the Club where he found Safford, and a joyous meeting it was. Then he asked if Safford could lunch with him, but reasons showed conclusively that it could not be. So Richards lunched on a nice capon, and his pretty friend and waitress, Miss Ethel, put a carnation in his button hole, and, as he left the Club, he told his friends there, "That was the banquet of the M. I. T. Class of '68 celebrating its sixtieth anniversary."—ROBERT H. RICHARDS, *Secretary*, 32 Eliot Street, Jamaica Plain, Mass.

**'74** The only important news from '74 is the recent marriage of classmate Chase which took place in Vancouver, B. C., on July 14. Mrs. Chase was formerly Miss Florence A. Buchanan of Brookline. They were married at the home of her sister, Mrs. John Ogilvy. They have the best wishes of the Class.—CHARLES F. READ, *Secretary*, Old State House, Boston, Mass.



THE CLASS OF 1903 REUNION

**'82** The notable success of last year's reunion, enhanced as it was by the presence of the ladies, was ample warrant for again planning a day together at the Mayflower Inn at Manomet Point, Plymouth, Mass., in celebration of the Forty-Sixth Reunion. Here on June 29 of this year nineteen members and guests arrived promptly by auto and sat down at one o'clock to three hours enjoyment of a most appetizing shore dinner and renewal of old acquaintances. Comprising the party were Miss Ames, fortunately able to attend, after she had expressed fear that attendance might be impossible; Cheney, who drove from South Manchester, Conn., for the day; Darrow; Duker from Baltimore who had previously met with the Class only twice since freshman days; Faunce of Carnegie, Penna., who fortunately was visiting nearby in his ancestral home town of Kingston; Mr. and Mrs. French, Gooding, Mr. and Mrs. Herrick, Mr. and Mrs. Jenkins, Mr. and Mrs. Snow and their daughter, and much to the delight of all, Mr. and Mrs. Thompson of Glen Ellyn, Ill., who fortunately were temporarily in the East, and Wardwell of East Orange, N. J., who joined the class organization on the occasion of the Fortieth Anniversary in 1922.

As is only too frequent on such occasions, there were various disappointments in the matter of attendance. Although Lewis had planned to attend with his wife and son, who is a recent graduate of M. I. T., he wired at the last moment that he would have to give it up. The presence of Chapman seemed absolutely assured by the fact that he is now most conveniently located nearby as a permanent resident of Plymouth, but on this occasion his presence was prevented by a call to court.

Munroe was prevented by a case of intestinal grippe. John Ross, who had been enjoying a visit abroad, was taken ill in Copenhagen, compelled to return home

and to give up his plan for attendance, while A. W. Walker, who had also only recently returned from a European trip, couldn't be prevailed upon to give up business long enough to enjoy the day with his classmates. But a most interesting feature of the occasion was the presence, as a guest, of Technology's oldest and best preserved alumnus, Professor R. H. Richards, '68, who entertained us by reminiscences of the early days at Technology. Letters from distant members also added to the enjoyment. Adams of Seattle wrote in the same merry vein as last year. His letter referred to Ayers' recent sad loss in the death of his wife. Mrs. Clark (Carrie Rice) of Los Angeles gave encouraging prospect of her presence on some future occasion. Johnson, also of Los Angeles, most facetiously gave assurance that he still had "most of my original teeth, half of my original hair, hearing just a little impaired, weight normal, health good, and so on. Domestically, I have one wife, the original one. I have not seen any later model that I felt like trading her in on, which shows what an old fogey I have become. I also have three boys and three grandchildren. My oldest boy is a Ph.D. in Chemical Engineering and has a job with the Standard Oil Company. The next one is head of a department in a local bank, and the baby, a sophomore in college, is earning some money this summer by acting as a general utility boy in an auto service station, hoping to be able to go to Europe next fall with a college chum and tour it on a bicycle. I would like mighty well to be with you, but I fear that pleasure will have to be deferred to a later date, possibly 1932, but I hope not."

The Secretary is now comfortably established in the old Cape Cod town of Falmouth, but his office address remains as below. Cheney is chairman of the Building Committee of the new \$1,500,000 County Court House now approaching completion in Hartford, Conn. The address of the Munroe Felt and Paper Company, of which "J. P. M." is President and Treasurer, has recently been changed from 79 to 77 Summer Street, Boston. Of original members of the Class it is reported by the Alumni Office that Miss Alice A. Stevens of Course V is now living at The Gralyn, 20 Charlesgate West, Boston, and that Thomas T. M. Sargent of 162 Tremont Street, Boston, died October 22, 1927. Richard H. Hunt, who entered the Institute with the Class of '82, is now located as architect at 345



1882 Continued

West 88th Street, New York.—WALTER B. SNOW, *Secretary*, 115 Russell Street, Watertown, Mass. RUFUS F. HERRICK, *Assistant Secretary*, 24 Milk Street, Boston, Mass.

'83 This was our Forty-Fifth Anniversary. It was celebrated at the house of David Wesson, 111 South Mountain Avenue, Montclair, N. J., and at his summer cottage at Mantoloking, N. J., on the shores of the Atlantic Ocean and Barnegat Bay. Gale, Chase, Bryant, and Underwood, escorted by their better halves arrived in Montclair on Saturday afternoon, June 9. After shaking off the dust of travel they sat down to dinner with the host and hostess. The glasses were filled with some fermented grape juice resulting from scientific experiments of the host, and all drank heartily to the health of George Smith who could not come.

After dinner the cigars were lighted and Wesson brought out the voluminous file of correspondence which he had had with the different members of the Class in his attempt to organize the reunion. On taking account of stock it was found there were nineteen original graduates and only thirteen remain. Despite repeated efforts only the following members were heard from: Bryant, Chase, Eppendorff, Gale, Scott, Smith, Tenney, Underwood, and Wesson. No word having been received for the last two years from Davis, Fuller, Hutchinson and Mansfield, they were declared officially dead, and unless they write to either Wesson or Chase, no attempt will be made to communicate with them in the future. The Class has lost by death during the last forty-five years, Bardwell, Foran, Gustan, Harriman, Leonard and Thompkins.

Letters were read from the various class members who could not come and also from the various associates. Either the letters or abstracts from them follow:

John C. Eppendorff is with Fling and Kent, 562 Main Street, Buffalo, N. Y. He tried to get away but important matters kept him in Buffalo. — George Smith wanted to come but owing to the illness of several key men in his plant he had to stay home. He was very sorry he could not be with us. — Frank Tenney writes from Haverford, Penna.: "I am afraid I shall have to give up the Forty-Fifth, but I shall look forward to the Fiftieth, D. V. While my health is much better than a year ago I hardly feel up to the wild times which I know are in store for those who attend. Give my best regards to those who attend and tell them I shall be with them in spirit (singularly) if not in person."

R. W. Scott of 112 North 9th Street, Philadelphia, wrote on April 18: "I have been away and expect to leave again shortly on a matter connected with my father's estate. It is not probable I shall be there in June. Best regards." — George B. Willcutt, now with the Market Street Railway Company, 58 Sutter Street, San Francisco, Calif., sends the following: "Your favor of the fifth instant was duly

received suggesting a reunion on the 'Jersey shore,' and I regret that it was necessary to follow up your inquiry to obtain a reply from me. The delay was due to a slight indisposition and a rush of immediate matters in my office, causing personal affairs to be temporarily laid aside. Your suggestion is a most attractive one, but I regret to say that the long distance intervening will prevent my being able to accept at this time, but I certainly trust to have better luck on some later occasion. Your expressed wish that you will not have to wait for a Fiftieth Anniversary certainly substantiates your comment that time is fleeting, as we are anticipating holding a Fiftieth Reunion of my Class of 1879, from the University of California at Berkeley. I unearthed some time ago, and now have upon my desk, a small photo of our Metallurgical bunch, taken just outside of the laboratory window, in which you are standing on my right. Do you remember it, and if not, would you like to have a copy of it as a souvenir of the days that are past? Personally, I followed up metallurgical work for a while after leaving Technology, but at a time when mining and metallurgy were about dead, I was induced to go into the street railway business, and I am still located in that. During my years in the railway business I have had various operating, mechanical and secretarial positions. I have been East but few times during these many years, and on such occasions I have had but little spare time in your locality to look up old acquaintances. I will, however, promise that if I am in your vicinity again I will take the opportunity of looking you up, and I trust that if you are in the West you will give me the pleasure of seeing you. With kindest wishes to all members of the Class of 1883."

F. B. Richards of Cleveland wrote: "I cannot promise at this time to be present at a reunion in June, but I wish to thank you very much for calling my attention to the matter, and if the meeting is arranged and you will let me know, I will decide when the time comes if it is possible to come. I am still with the above company (the M. A. Hanna Company) Director and Vice-President of several of the subsidiaries, and chairman of the Board of the Hanna Furnace Company. I am in fair health and still plugging. This is about all I can say for myself."

Edward F. Stevens, F. A. I. A., of 45 Newbury Street, Boston, wrote: "I have had the date of June 9 in my engagement book for a call on you at Montclair, N. J., and both Mrs. Stevens and I had planned to be there without fail, but it just so happens that one of my clients in Montreal has given us a pretty big problem to work out and to do quickly, and it means that I must spend practically the entire week of June 4 at my Canadian office and at Montreal to get these sketches before the committee in order to get the work started. As much as I regret to say so, I fear I must forego the very great pleasure of meeting you at your home over the week-end. Thank you

most cordially for the invitation and I regret that I must give up this few days pleasure."

M. A. Lawton, now with Andrew J. Morse and Son, Inc., of 221 High Street, Boston, wrote: "We certainly did have a good time five years ago at Hyannis, and I wish I could be with you for this next reunion, but I am afraid it is impossible. I have had a very bad operation since I saw you, and I don't believe it is advisable for me to try to attend this reunion. You may be sure that I shall think of you all and wish to be remembered to you all."

W. Merriman of the Interborough Rapid Transit Company, 2545 Seventh Avenue, New York, wrote: "I have read your letter of the fifth several times and think you have elements enough to give anyone a good time, and for myself, it would not be necessary to add anything more. I came from a sailor's family, and when I went to Technology it was not because I wanted to go there, but that I wanted to go to sea. While I like mountains, there is salt in the blood, and nothing appeals to me like a trip to the shore. As a matter of history, just family history, it was off Barnegat that the last ship that my Father built and managed for twenty years went to the bottom in a gale in 1901. He had sold out and was not an owner at that time, but the location would be an interesting one to me. I am expecting to go down to Maine during June so it would not do to count on my being with you in the flesh, but I will be in the spirit. I cannot see why everybody should not enjoy himself."

Dwight F. Boyden of Annapolis, Md., says in his acknowledgement: "Sorry, but I can't make it as I am dated up since last fall for the two weeks starting June 9 for a fishing trip down to the Virginia Capes. Remember me to all and say were it not for this trip I would be on hand once more. Best wishes and good weather."

E. L. Tuttle, Secretary of the Waterbury Trust Company, Waterbury, Conn., wrote: "I am sorry to say that it will be impossible for me to join your party on the date mentioned. I have already planned a trip with Mrs. Tuttle immediately following and cannot get away before."

Harry W. Kingsbury wrote from Scranton, Penna.: "Your recent letter about another reunion for '83 is in your usual hearty and genial form. I appreciate having it even though I cannot accept the invitation at the time you named. Mrs. Kingsbury and I have been away for the greater part of the winter season, and expect to go away for the summer the early part of next month. My time is limited you see. It is very good of you to make these efforts to bring the Class together in the attractive way that you have done. Please accept my kind regards and all good wishes for an enjoyable reunion."

Mr. and Mrs. E. W. Kingsbury wired that they expected to come but had to wire later "Have been trying in vain to get away from a job here in order to be



1883 Continued

with you. All greetings and best wishes to you all."

Miss Clara M. Pike of Hampton, N. H., wrote: "Please accept my appreciative thanks for the kind invitation to attend the forty-fifth celebration of my class reunion. I did receive your note of April 5, but in it you referred to a meeting which I did not attend, so I inferred some mistake had led to my invitation. I am deeply interested in the June reunion in Montclair, N. J., and regret that it will not be possible for me to accept your cordial invitation." — Julian W. Vose regretted that his grandson and he were going for a long trip through the West which interfered with his being with us. — Winthrop Alexander in 1927 was superintendent of grounds and buildings at Rutgers University, New Brunswick, N. J. We have been unable to get an answer out of him this year, although he wrote several times last year.

To return to the Reunion, Chase, the Class Secretary, complained of his long years of laborious duty and the difficulty of getting results from his entreaties and persuasions to different members of the Class and he resigned his position of Secretary with great pleasure and nominated Wesson to be his successor. Those present all seconded the nomination and the job was wished on Wesson who was not particularly looking for it. But in the cause of science and devotion to '83 he said he would carry on. Chase is so busy trying to extract oil out of Georgia real estate that he has little time left for trying to extract information from members of the Class.

Sunday was spent enjoying Montclair and its environs. In the afternoon George Underwood's daughter motored down from a Vassar reunion and joined the party. The evening was devoted to conversation and the lantern slides shown by Wesson, who had quite a number showing how the Class looked at the time of their graduation and how they look today.

Monday morning a procession of five automobiles started for Englishtown, N. J., where the crowd had lunch at the Village Inn which was founded in 1732. The inn is filled with beautiful pieces of antique furniture and Colonial relics and is within three miles of the Monmouth Battlefield. It was at this inn that General Washington and Lord Sterling signed the warrant for the court martial of General Charles Lee, and the crowd partook of their luncheon in the same room where this important document was signed.

After luncheon a visit was made to the church which was used as a hospital by the British during the Battle of Monmouth, and on the way to Freehold, a short distance beyond the church, the well of Mollie Pitcher was seen by the roadside. A beautiful concrete road was followed to Lakewood, which was visited on the route to Mantoloking which is near Point Pleasant, N. J. Part of the crowd stopped at the Ocean View House and the rest of them stopped with the Wessons at "Sand Joy," their summer cottage on the beach.

Monday night a sumptuous shore dinner was enjoyed at the Ocean View House. The rest of the evening was spent in telling stories. One story about Mary and her little skirt was committed to memory by the crowd. It seemed to please the ladies particularly.

Tuesday morning the Bryants and Gales motored back to Massachusetts, and the Chases departed by train for New York. The Underwoods remained with the Wessons and went sailing in the yacht *Viking*. They departed by motor early Wednesday morning. And thus ended our '83 reunion on our Forty-Fifth Anniversary. — DAVID WESSON, *Secretary*, 111 South Mountain Avenue, Montclair, N. J.

**'84** The Annual Dinner of the Class was held at the University Club, Boston, on Monday, June 4. Those present were: Chase, Dearborn, Fitch, Gill, Holder, Stuart, and Tyler. Letters were read from Bardwell, Bartlett, Coburn, Dearborn, French, Johnson, Morse, Prescott, Purinton, and a message from du Pont's secretary. A message of good wishes was telegraphed him in the name of those present. A pleasant incident of the occasion was a brief visit to the Class of '78, holding its semi-centennial at the University Club on the same evening.

The Secretary was much surprised to receive from Lyle a clipping from the *Philadelphia Ledger* with a picture showing Ryder conferring the J. Peterson Ryder medal for service upon a student. It is quite unusual to have a medal struck for any one while still in the flesh. The election of Gill as Class Secretary and Alumni Council representative, succeeding Tyler, was reported. — A. H. GILL, *Secretary*, Room 4-053, M. I. T., Cambridge, Mass.

**'88** The Class held its Fortieth Reunion at Great Chebeague Island, Casco Bay, Maine, on June 22, 23 and 24. The Secretary is a pretty good guesser as to the number that will attend gatherings of the Class, but this time he was way off in his estimate of a couple of dozen, whereas thirty-one members were present.

We started from the University Club, Boston, at nine o'clock, June 22, in cars furnished by members, had a fine luncheon, really a shore dinner at the Duncroft, West Scarborough, Maine, having had a beautiful trip down, the latter part being along the shore. Portland was soon reached, where we embarked in a couple of chartered motor boats for the trip down the bay to our destination, which was reached in ample time for golf before dinner. The evening passed all too soon while we sat about an open fire, for it was cool in Maine, and talked of old times and renewed old friendships.

The next morning it was golf again for about half the party, while the others looked over the beautiful island. In golf Frank Moore was easily the best of the party, although Collins, the club champion, might beat him in the summer

when in his stride. The foursomes shifted as to their make-up so that a good opportunity was afforded to get in touch with different members. B. R. T. Collins, a summer resident, who induced us to go to Great Chebeague, had made all the local arrangements and everything went like clock work.

At noon we all gathered on the beach and thoroughly enjoyed a clambake prepared by Sawyer and Faunce, who officiated in the same capacity at Duxbury, Mass., five years before. The New Hillcrest, our headquarters, had supplied sandwiches, doughnuts, coffee, and the necessary utensils and dishes. Fred Wood was there with his camera and Shaw had a movie machine. He ran off a lot of film which will be projected on the screen at the next class meeting. Included in the pictures is one of a parade headed by Mead in his original Technology cadet uniform. This clambake with its informality and get-together spirit was an extremely pleasant affair. Here Stone and Webster had to leave us, but it was great to have had them present.

Then there was Minturn T. Wright of Philadelphia, who had not met with us on any previous reunion. Frank A. Moore of New York and Herbert S. Bird of Brooklyn were in the same category. It took the Fortieth Anniversary to bring them out. Shaw had fully expected to have his yacht, the *Andiamo* there, but delay in setting a new mast prevented.

Our class dinner came off on Saturday night and a good one it was with freshly caught lobsters as the principal item. We didn't inflict on any one the making of a speech, but when, after dinner, we gathered in the big room in front of that open fire, there were many spontaneous contributions of wit, wisdom and reminiscences which provided an evening to remember.

Sunday afternoon the party began to break up, but a good number remained until Monday to avoid the congestion on the roads and to spend a little more time on beautiful Chebeague Island. The Secretary has received many letters or statements in person that the affair was a great success and that it will afford those fortunate enough to be present a pleasant experience to look back on. We had a fine group photograph taken in Portland, and the Secretary will send a halftone reproduction of it to members unable to meet with the Class on this Reunion.

Those participating in this joyous occasion were: Baldwin, Besler, Bird, Blodgett, Bridges, Burtolph, Cheney, B. R. T. Collins, Conner, Devens, Ellis, Faunce, Faxon, Fuller, Hamblet, Horn, Keough, Mead, F. A. Moore, Pierce, Runkle, Sawyer, Shaw, Sjostrom, Snow, Stetson, Stone, Thompson, Webster, Wood, and Wright. — WILLIAM G. SNOW, *Secretary*, 112 Water Street, Boston, Mass.

**'90** Harry Spaulding with Mrs. Spaulding in August spent a few weeks at East Bay Lodge, Osterville, Mass., where we held our Thirty-Fifth Reunion. While there, they

1890 Continued

motored over to Woods Hole and called on Gary Calkins and his family. Gary has a summer home there, and when he is not examining microbes, he is found on the golf course.

John Batchelder's boy, a junior at Harvard, is following after his dad in sports. On Labor Day rowing for the Union Boat Club, he successively won the novice singles and intermediate singles without climbing out of his boat. He also rowed in the Union Boat Club with the winning four-oared boat. — Charlotte A. Bragg, Professor of Chemistry at Wellesley, was one of the two women present at the meeting of the American Chemical Society in Swampscott in September. — The Hayden trophy for rifle shooting has finally been won by the U. S. Marine Corps. Charlie Hayden has now donated a thousand dollars for the purchase of another one.

Darragh de Lancey's boy, Junior, graduated at Princeton last June. He was voted the second most scholarly, the second most likely to succeed, and the third most brilliant. He was graduated Magna Cum Laude, and goes abroad for a year on the Palmer Fellowship that he won. Darragh sailed in June for a ten week trip in Italy. This winter he expects to go to Greece for inspection work.

Willis Whitney was recently elected a Vice-President of the General Electric Company. He is the director of the research laboratory of the company. In June, Willis was appointed by the Navy Department as one of the three engineers, with two retired admirals, to investigate submarine safety devices under a Congressional appropriation of two hundred thousand dollars. — Dr. Franklin W. White has been appointed an instructor in medicine at Harvard University.

We note that Cabot J. Morse was among the golfers at the Seniors' Tournament at Apawamis in September. Cabot came in the age class of sixty to sixty-four. His score was 45-49 for a total of 94. Guess that would beat most of the Class. During the summer your Secretary had a few rounds here in Lexington with Billy Ripley, and they are ready to meet any of the rest of you any time you will come to this part of the world.

Hayden is Chairman of the Republican Finance Committee of New York State. He says that the sky is the limit for contributions, so after you have sent in your subscriptions to the Dormitory Fund Committee, if you have anything left Charlie could use it. In August du Pont offered his resignation as Chairman of the General Board of the General Motors Company on account of his connection with the Association against the Prohibition Amendment and having come out for the Democratic candidate for President. The resignation was not accepted. It looks as if our Class was quite in the political limelight, thanks to du Pont and Hayden. The rest of us can vote as we please.

Cards have been received announcing the coming marriage of Charlie Sherman's son in October. I guess we are all getting older and many of you are already

granddads. — You have all received by this time the letter sent out in September by your class officers telling of the need of dormitories at Technology. We trust that many of you will feel that you can contribute and we know that you will be glad to do what you can for Technology. — GEORGE L. GILMORE, *Secretary*, 57 Hancock Street, Lexington, Mass.

'92 The Boston *Evening Transcript* for August 9 records the sudden death of J. Randolph Coolidge at his summer home on Squam Lake, Sandwich, N. H., on August 8. Mr. Coolidge was born in Boston on May 17, 1862. He was graduated from Harvard in 1883 and also studied at the Dresden Polytechnic University, the University of Berlin, the Institute of Technology and the École des Beaux Arts. He was a member of the firm of Coolidge and Carlson, Architects, until his retirement from business in 1924. He was prominent in a great many outside interests. He was director of the Boston Museum of Fine Arts, a trustee of the Boston Athenæum, President of the Boston Society of Architects from 1905-1907, President of the Boston Chamber of Commerce in 1913 and 1914, and active in the American Library Association. Upon his retirement to Sandwich he was elected a member of the New Hampshire State Legislature and had been re-elected two years ago. Mr. Coolidge leaves a wife, four sons and three daughters.

An editorial in the same paper calls Mr. Coolidge "a citizen of distinguished personal character and keen public spirit. . . . Born in high station, unquestionably conscious of that station, undoubtedly a man cast in the aristocratic mould, Mr. Coolidge felt one thing above all, namely that he had a duty to turn to the public good his private assets of training and educational privilege. And so one finds him — a man of inherently scholarly characteristics, largely unworldly in his thought — serving as President of the Boston Chamber of Commerce, when that was the call which came to him, for the first time that it had ever come to an architect; now laboring for the advancement of public libraries in Massachusetts, and making all professional librarians in the Commonwealth feel that here, at last, was a man of the 'trustees' section' of the Massachusetts Library Club who thoroughly understood them and their work, and cared quite as much for the humblest reader of good books as he did for the most exalted.

"Never at any time was Mr. Coolidge seeking personal credit for what he was doing. And the result is that the record of his attainments is written very largely in the inspiration which he gave to others, the spirit of reasonability and of quiet research for facts as a basis of policy which he made to prevail among those associated with him in any enterprise, whether among the trustees of the Museum of Fine Arts or in the directorate of the Chamber of Commerce."

On June 18 at the commencement exercises of Bates College at Lewiston,

Maine, an honorary degree of Master of Arts was awarded to Harry J. Carlson, "whose mastery of one of the finest of the arts has given to this campus three notable buildings. He is a preacher in stone of the gospel that utility is most useful when joined to beauty." The buildings designed by Mr. Carlson, who is the senior member of the firm of Coolidge and Carlson, are the Chapel, Chase Hall, and the gymnasium group which includes the Locker Building, the Gymnasium and the Athletic Cage. — Edmund Shaw, who has been one of the editors of *Rock Products* since 1923, and who has many friends and acquaintances in the rock products industry, is taking a leave of absence from his routine duties to recuperate from a severe illness which has kept him from his work since the latter part of June. He will make his home in Los Angeles, Calif., for several months at least. He remains, of course, a member of *Rock Products's* editorial staff and will contribute special articles and expert advice on the industries with which he is most familiar. He will also be a staff representative of *Rock Products* on the coast, and eventually will undoubtedly be able to travel about among the plants there as he has done in times past. — JOHN W. HALL, *Secretary*, 8 Hillside Street, Roxbury, Mass.

'94 Another so-called vacation period has come and gone, and the Secretary finds himself striving to recall the classmates he has met, and the news of others that has filtered in to him from various sources. Letters have been received from several, especially in regard to the campaign for the class dormitory. One of the most satisfying of these was from A. G. Zimmermann, who is practicing architecture in New York City, and who wrote that although he had already made one contribution, he was enclosing a check in addition to further express his approval of the project and his belief in its usefulness in improving student life. This is the spirit that a number of men have shown, and it is most gratifying to the Secretary and repays him for the toil involved in a task which is purely a labor of love and loyalty. He hopes that many more will follow the example so splendidly set by Zimmermann. This makes a convenient place to announce that a last call will soon be issued. Let's finish up our part of the plan this fall. Twenty thousand more will do it.

At the big meeting of the American Chemical Society at Swampscott the Secretary had a momentary meeting with Harry Bates who had come up from Atlanta to attend. If appearances may be relied upon, Bates is happy, active, and successful in his profession. It is much regretted that a promised later interview did not take place, but it was a very busy convention. There were doubtless a number of '94 chemists in attendance. Claflin was one of those contributing papers, but the Secretary did not see him.

Patrick was in Boston in June to see his son graduate in Course XV. The Secretary



had a delightful call from him, made all the more memorable by the receipt, a few days later, of two excellent reels which now hold places of honor in the fishing outfit of the writer. They are worth many times the free advertising given by this memorandum. Henry Ripley, who also has a son at Technology, is a candidate for State Senator in the present campaign. His election will be approved by all the '94 crowd. Phelan, Gardner, and Prescott also have sons in the Institute, and Kimberly has one preparing to enter. Perhaps there are others.

Fred Baker has recently sent in a new address, 2 Grace Court, Gardner, Mass. — Howes sends a new office address, Room 509, 40 Broad Street, Boston. — Tom Richards is now Technical Head of Data Section, General Motors Testing Laboratory, Detroit. — Harry Russell has moved to 23 Joy Street, Boston, and is well known for his architectural work. — Arthur Shurtleff is consulting landscape architect for the organizations which have successfully brought about the protection of the beautiful Franconia Notch in the White Mountains, and which are carrying out the plans for its conservation as a natural park.

Thropp has moved from Hagerstown and his present address is 400 Elm Street, Chevy Chase, Md. — G. C. Abbot, Secretary of the Smithsonian Institution, was recently elected director of the Research Corporation of New York, to succeed the late Dr. Walcott. — J. H. Gardner is one of a group of steamship men who propose to organize the Transoceanic Corporation to build giant steamships which can cross the Atlantic in four days. He has had a business and professional experience which amply fits him for such an association. — N. S. Bean and E. M. Hunt were among those in attendance at the outing of the New Hampshire Technology Club, an annual event at the beautiful home of E. W. Rollins, '71, at Three Rivers Farm, Dover, N. H. — F. M. Noa is connected with the Los Angeles County Farm, Hondo, Calif. — C. R. Boss has opened an office as Investment Councillor, 309 State Street, New London, Conn. — It is with great regret that the Secretary announces the demise of A. N. Habberley, which took place at Melrose in 1926. News of it was not received at the time, but our sympathy to his family will be none the less sincere. The Secretary not only invites but urges all members of the Class to send in items concerning themselves and our classmates. Modesty was always a '94 characteristic, but be assured that we are now old enough to mention our own activities without blushing. Let the news flow in. — SAMUEL C. PRESCOTT, *Secretary*, Room 10-405, M. I. T., Cambridge, Mass.

'95 The final story of the campaign for the funds for the 1895 Dormitory Fund is as yet untold. During the summer some few subscriptions have been sent to your Secretary, and any others not yet mailed will be very gratefully received. It is planned to furnish you in the next issue of

The Review with a statement covering the situation to date.

Frank C. Schmitz has announced his resignation as Secretary and General Manager of the Mahogany Association, Inc., to become Vice-President and General Manager of the International Fireproof Products Corporation, 11 West 42d Street, New York.

Lieutenant Colonel Percival M. Churchill gave your Secretary a delightful surprise, when he called on him at Ayer, Mass., Saturday afternoon, July 21. Churchill was serving at Camp Devens during the encampment of the Training Corps during the summer. Just as masterful as ever in stature, he has grown a vandyke which has contributed much to his handsome makeup. We poured over many reminiscences, as some years had elapsed since last we met. Any mate passing through Ayer is requested to call on your Secretary. The latchstring is always outside the door.

W. B. Stork, Lieutenant, U. S. Navy (Ret.), sent in his subscription from Rome, Italy. Stork has been traveling in Europe, and you can reach him in care of Morgan and Company, 14 Place Vendome, Paris. — During the last of May, the Technology Clubs Associated held their annual gathering at Atlantic City. Sammy Sadtler, Mrs. Sadtler, Luther Yoder and Mrs. Yoder were the only 1895 boosters attending. Although the class representation was small, nevertheless, a genuine reunion was held at the enjoyable dinner dance.

The announcement has been received of the graduation of Mary Alice McManus, daughter of Reid McManus of Moncton, New Brunswick, Canada, from the University of St. Francis Xavier's College, Antigonish, Nova Scotia. — During the first week of July your Secretary lunched with F. B. Cutter in New York. Fred is Secretary of the New York boys, and has done splendid service for '95. A great number of men were out of the city, but we had a delightful visit with Arthur Canfield and Richard Sheridan. Arthur looks the same, and holds his weight, but Dick has grown more handsome, yet portly.

The death of Fred A. Davenport, at one time Treasurer of the A. H. Davenport Company was reported last June. The funeral was held at his residence, 70 Salem Street, Malden, Mass.

The death of Miss Jessie Fremont Emery, '95, occurred in Watertown, Mass., in January, 1928, but was not recorded since the notice was only recently received. Miss Emery had been retired from professional life for a number of years. She had been living in Cambridge, after residing for a long time at the Hotel Warren in Roxbury, Mass. A native of Waterville, Maine, she prepared for her life work of teaching at the Framingham Normal School, later taking special courses at Technology, with the Class of 1895. She had taught at various places including St. Albans, Vt., and Pawtucket, R. I.

All '95 readers of The Review should remember that the class news depends

upon your efforts and not wholly on those of your Secretary. — LUTHER K. YODER, *Secretary*, Chandler Machine Company, Ayer, Mass.

'96 With the beginning of the new volume of The Technology Review the '96 Class Secretaries wish to extend cordial greetings to all classmates and to express the hope that they have had good vacations and are now back on the job for the winter. In regard to the Secretaries themselves: Locke remained around school until August when he went to New Hampshire for three weeks, returning in time to attend the Regional Meeting of the American Institute of Mining and Metallurgical Engineers in Boston the last of the month. Following that he motored to Ontario for a two-week trip, returning by way of Pennsylvania and New Jersey to visit the Mining Surveying Camp at Dover, N. J.

Rockwell was away for three weeks in September on his annual visit to his brother, Warren, in Harriman, Tenn. He visited Chattanooga and had considerable golf as a side line. On his way home he stopped off to visit his sister in Montclair, N. J., and also had the opportunity to see the tennis matches at Forrest Hills, Long Island, where the Frenchman, Cochet, won out over Hunter, the American. Since his return to Cambridge he has had some golf in four-somes with Joe Driscoll, Fred Damon and another man. Rockwell reports that Damon has continued to improve his game and is a most radical golfer. It seems certain that at our next reunion the fellows will have to come prepared or else Fred Damon will walk off with all of the honors. At present he apparently not only plays golf in the daytime, but dreams about it at night.

Dan Bates, who has become President of Bates, Inc., reports that the reorganized company has removed its offices to 112 North Broad Street, Philadelphia. — Butler Ames, who has never been able to get the political bug out of his system, had a strenuous campaign this fall when he ran as candidate for the office of United States Senator from Massachusetts, but unfortunately, although he made a good showing, he lost out at the primaries to the other fellow who received more votes. — A. Victor Shaw writes that he is still making his headquarters in Alaska and doing writing in connection with his position on the editorial staff of the *Adventure Magazine*. He is located at Loring, which is merely the site of a salmon cannery and comprises a couple of dozen shacks fringing the inner end of Naha Bay, twenty-five miles north of Ketchikan. He selected the place as headquarters on account of its sheltered harbor and weekly mail boat to Ketchikan; also for the wireless connection from April to October and the excellent hunting and fishing adjacent, the comfortable house and garden, and the quiet outlook on the beautiful bay which makes it an ideal spot for Shaw while he is making his living by scribbling fiction.



1896 Continued

Henry Waterman, who returned to his native city of Yarmouth, Nova Scotia, some years ago, has sent a copy of the Yarmouth *Herald* of July 10 which contained the surprising information that Waterman is now Mayor of the city. That particular paper contained an account of the visit of Kiwanians from Malden, Mass., to the Yarmouth Club where they were royally entertained and where Mayor Waterman in his official capacity extended greetings to the visitors. As would be expected from Waterman, the address was not all words but contained some excellent ideas. It is a matter of regret that space is not sufficient to allow it to be printed in full here.

Gene Laws resigned from his position as metallurgist for the Nichols Copper Company on August 15, but he is still retaining his residence in Brooklyn, N. Y., until he finds another position or, if something does not turn up within a reasonable time, he may go later to Salt Lake City. Any one in need of a good metallurgist who knows the game of copper and lead as well as other non-ferrous metals needs only to apply to Laws. At last accounts he was considering a foreign connection, but was in doubt whether it was wise for him to go so far afield.

Henry Gardner, formerly consulting engineer with the Steamotor Company, Chicago, has become associated with the Comtor Company of Waltham, Mass., as Vice-President and Treasurer. He will be engaged in introducing the Comtor system to the many industries interested in modern quick precision methods of interchangeable production. Gardner was for many years special mechanical engineer on the Baltimore and Ohio Railroad with headquarters in Baltimore, but now that he is located around Boston, we shall expect to see more of him. — A report from Falmouth, Mass., states that N. F. Rutherford disappeared some months ago and his present whereabouts are unknown. If any one should have any knowledge of where he is, the Secretary will welcome such information.

Classmates will learn with regret of the loss which Jim Haste has suffered in the death of Mrs. Haste on July 11. The latter part of May she had a fall and broke her ankle but was recovering beautifully when, in the latter part of July, she suffered a severe heart attack from which she rallied but she was unable to withstand a second attack which followed. She had always been an especially well woman with never a sick day in her life, so that her death came as a great shock to her friends and especially to her husband to whom the Class extends deep sympathy.

George Hatch reports that in connection with his coal yard in Newton Centre he has been shovelling coal all summer and spending the week-ends with his wife in Maine. He is another golf enthusiast and acted as one of the marshals at the Brae Burn tournament in September. — M. L. Fuller's feet getting itchy again, he and his wife started off early in October for Morocco, Greece, Turkey,

Roumania and the Black Sea. He says that their trip of last winter to Central America proved most interesting. They met several former Technology men, especially those connected with sanitary work under the Rockefeller Foundation. In Nicaragua, the train just ahead of them was derailed by rebel sympathizers, while on their own train were a number of the marines injured in the well-known ambush. An incident in a lighter vein happened at Amapala when the commandante who, by the way, is said to be A. J. Williams of the Class of 1919, rushed a detachment to their ship to quell a supposed incipient revolution, which, however, was only the Chinese crew celebrating their New Year with giant firecrackers. This last summer they spent some three weeks on a 2,500 mile auto trip in New Brunswick, Nova Scotia, and Cape Breton, revisiting many of the localities which were visited by Fuller and Locke in the Technology geology and mining summer schools of thirty-five years ago. At Halifax they were guests of a mounted police official stationed at the naval dock yards. Rowing out to a visiting American warship, his brilliant uniform was mistaken for that of the Commander of the Citadel and he was given a seven-gun salute.

Joe Clary is back in Washington after having had a fine summer this year with the whole family together in New Hampshire except for the month when the old man had to stick by the Ship of State in Washington while the rest of the family were cooling off near the White Mountains. It is a question whether this extended period of family unity will occur again as the oldest boy will graduate next June and will be starting out for himself. In passing through Boston, Joe says that he just missed the explosion at Massachusetts Avenue and Boylston Street. Fortunately, he was two blocks away at the corner of Beacon Street when the blow-out came. In September the family made a short tour into Virginia in connection with the parking of the daughter at Sweet Briar College.

Ben Hurd returned from abroad early in September and was at Nonquitt, Mass., for about ten days before returning home to Nutley, N. J. This meant that he was so busy with getting the children in school and getting the family settled that he was not able to go to the fishing camp in Virginia in September as had been originally planned between Rockwell and himself.

When Henry Jackson started for Europe he promised to keep in mind the writing of an account of his trip for the class news. Here it is and it is submitted verbatim and uncensored, because it can be fully appreciated only when read in its original form: "As I told you this spring, I planned a trip to England, Scotland and Wales, but the wife and youngster had a few words to say with the result that we made a bit different arrangements. What they were you will see as we get along.

"On June 5 in the rain we started for New York and had a very pleasant run on the train and arrived safely at our hotel,

bag and baggage. A friend of my wife turned up soon and a very short time after her husband showed up and we had a very pleasant dinner together. Next morning it rained but we got to the ship nicely, however, the French liner *De Grasse*, as fine a ship as I want to travel on. After finding our stateroom and getting our belongings into it we got on deck. My wife's friend was right there soon, and almost the first person I saw was our old friend, Major, now Colonel Bigelow. We had a bit of a chat. He and his wife were on their way to spend the summer in Spain.

"We got away about on time and ran down the river in rain and mist. It tried to give us a bit of sun before we dropped Sandy Hook, but it was a failure. We carried rain and fog right over to France, but landed in fine weather at Havre one day late, not because of having to, but to show that by our going slow and the *Ile de France*, another French line ship, going fast, the *Ile de France*, starting three days later than the *De Grasse*, could beat her in. From Havre to Paris I enjoyed every minute as the scenery was so very different from anything I had seen. Then began our first and really last adventure. We were put into a taxi and the name of the hotel given to the driver, but the street name we did not get with the result that the driver took us to the wrong hotel. I knowing very little French and the driver no English we had a fine two-hours driving about to the various hotels until, after what seemed a year, we did find it.

"To get down to earth, we saw a bit of Paris — Notre Dame, the Louvre, Eiffel Tower, Madelaine, des Invalides, and others I can't remember. Then to Versailles, Malmaison, Fontainebleau, Barbizon; then to Montreux, Switzerland, Geneva, Chamonix, Lucerne, Interlaken; at Interlaken up the Jungfrauoch; at Lucerne up the Rigi. Then to Paris and over to London. The channel could have been crossed in a swan boat. At London we spent a few days seeing the Tower, the museums and churches. Saw the changing of the guard at Buckminster Palace, went to Oxford. Evidently Professor Lodge had gone home as we neither saw or heard from him. To Windsor, and saw it all I think. Then we took a nine-day tour down through Devon and Cornwall to Lands End. Saw Farnham Abbey, Exeter and Winchester cathedrals, Drake Island where the Pilgrims stopped and whence they sailed to Plymouth. Saw Penzance, Truro and St. Ives. Then to Clovelly and Lynton and Bideford, bringing to mind Westward Ho of Kingsley. Saw where he lived when he wrote it. Then to Launceston where George Fox the Quaker was imprisoned, to Taunton, to Wells, saw the cathedral, to Glastonbury and saw the famous Abbey, to Cheddar and saw its caves and wonderful gorges. Then to Bath, saw the Roman baths, and on to London.

"Thence to Edinburgh in a train which ran from London to Edinburgh in eight hours without a stop. There we saw Scott's monument, the Castle, Grey Friar's

Bobby statue, and Holyrood. Then to Abbotsford, Melrose and Dryburgh Abbeys, played golf at St. Andrews, through the Scotch Lakes and Trossacs, the English Lakes to Chester, and to Sheffield where we inflicted ourselves on our relatives for two weeks. Had a wonderful time. Then to Wales for a week near Llandudno. Then to Liverpool and home, rain and fog most of the way, but a wonderfully good time was had by all and now we are at home wondering if we had ever been, and was it not for the pictures, both still and moving, we have to show for it, we might think our trip was only a beautiful dream. To be honest with you, this trip was so wonderful to me and has impressed me so with the beauties of France, Switzerland, and the parts of the English Empire that I long to see more of them."

Just as these notes are being written on September 24, Elmer Robinson has telephoned the sad news of the sudden death of Stewart Bell from heart failure which occurred at his home in Reading yesterday. Bell was fifty-four years of age and leaves a widow, a daughter and three grandchildren. Although he went through a serious illness with his gall bladder about five years ago which kept him in the hospital for a while and was followed by a slow convalescence, he had entirely recovered and was apparently in excellent health, so well that he was planning to start on his vacation today. He had been a resident of Reading for years and had followed electrical lines of work, latterly being an independent salesman of electrical appliances. Funeral services are to be held tomorrow. Bell will be well remembered by his classmates as he had turned up at many meetings and reunions. To his widow and family the deep sympathy of the Class goes out.

Con Young visited Boston and the Institute on September 26, but much to his regret the Secretary was in Boston attending a luncheon meeting of the Technical Societies and missed seeing Con. He wrote a note saying that he had made contacts with Buster Crosby at Osterville off and on during the summer and Buster had taken Con and his party to Martha's Vineyard on Regatta Day and Con learned a lot of new tunes. He and Mrs. Young had five weeks in the White Mountains and Adirondacks, and in Vermont saw Helen Chamberlain Dodd and sweetened up on some of her latest maple sugar. He reported that she is the same sturdy, brilliant and breezy Helen. From Boston he is going to Osterville for a week and then to Washington for two weeks, whence he will cross the water for a winter in Italy which he hopes will restore him to normal health. — CHARLES E. LOCKE, *Secretary*, Room 8-109, M. I. T., Cambridge, Mass. JOHN A. ROCKWELL, *Assistant Secretary*, 24 Garden Street, Cambridge, Mass.

'98 It is a sobering thought that our Thirtieth Anniversary has passed, particularly for those who were not able to get to the Mayflower Hotel, Manomet Point, Plym-

outh, last June to celebrate the passing of the milestones. To those who were there the memory of a joyful reunion makes the anticipation of the passage of another five years to our Thirty-Fifth outweigh any sadness over the fact that so many have already passed. A total of fifty-one were present as follows: Bob Allyn, Mrs. Allyn and daughter Starr, George Anthony and Mrs. Anthony, Elliott Barker, Mrs. Barker, Kenneth and Miriam Barker, Blanchard, Bragg, Butterworth, Byam, Sam Chapin, Frank Coombs and Mrs. Coombs, George Cottle, Maurice Delano, Dan Edgerly, Earle Emery, Dave Fenner, Fleisher, Lester Gardner, Hollis Godfrey and Mrs. Godfrey, Ben Hinckley, Jack House, Kaufman, Lambert and Mrs. Lambert who was Mabel Forrest, '98, Van Lansingh, Herbert Lord, Roy Peavey, Arthur Porter, Henry Richmond, Joe Riley, Attmore Robinson, Ernest Russ and Mrs. Russ, Tom Tallmadge, George Treat, Jack Underwood, Bob Wallace, Edgar Weimer, Charlie Wing, George Wright and Mrs. Wright.

Of all the entertaining things that went on, we remember that golf claimed a lot of enthusiasts and that Felix Porter was awarded the prize although there were other wonderful performers. Tennis was the most warmly contested of the competitions and the honors went to Dan Edgerly, who promises to be at the Thirty-Fifth to defend his title. Fishing had its adherents who went off one day with Charlie Wing. Tom Tallmadge went off with a party on a historical pilgrimage over the Cape and we shall be looking soon for features of New England Colonial architecture to appear in Chicago buildings. Bridge had its adherents evenings and the one rainy forenoon, and we particularly noted the remarkable play of Irwin Kaufman, Bob Wallace, Van Lansingh, Del, and Felix Porter. Best of all, however, were the meals together when the old spirit of comradeship had full play, and the groups on the veranda and in the big parlor where every sort of thing from the cane rush to electric refrigerators and industrial mergers was discussed.

Paul Johnson reports his fourth grandchild, Caroline Hannah Bates, born last May. He has a big gasoline yacht in which he recently took a sixteen-day cruise off the coast of California and Mexico. — Hiller sends word that Albert W. Hitchcock (temporarily listed with address unknown) is Personnel Manager for the Underwood Typewriter Company, Hartford, Conn. — Zimmermann writes: "I occasionally run across Jim Sickman who is quite the big gun at Ontonagon, Mich., where he has charge of the Ontonagon Fibre Company's pulp and paper mill. He is the same old fellow and whenever we get together we have great times rehearsing some of the doings of years ago."

Lester Gardner is President of the newly organized Aeronautical Industries, Inc. This seems to be a sort of investment trust based on the aviation industry. The trust funds will be invested in securities

of all kinds of enterprises connected with aviation. We believe Lester's idea is that immediate returns from the investment are not to be expected, but that in time they may be large if aviation grows to the extent that many expect. — One of Roger Babson's newest enterprises which we have mentioned before is Webber College which trains women in finance as the Babson Institute does men. Webber College is particularly sponsored by Mrs. Babson. The college is located in Babson Park, Fla., but we note from the latest circular that the work of the course may be divided between Boston and Florida.

We note from a copy of the *Daily S. A. E.* (Society of Automotive Engineers) under the whole page headline of "Strickland Wins" the following paragraph: "W. R. Strickland, Detroit, assistant chief engineer of the Cadillac Motor Car Company, is the 1929 nominee for President of the Society of Automotive Engineers, it was announced last night at the annual grand ball. Mr. Strickland, now first Vice-President of the Society, and Chairman of the current technical program committee, has long been a prominent figure in the automotive industry. His S. A. E. activities include membership during 1925-26-27 in the ball and roller bearings division, and the chairmanship in 1925 of the Detroit Section and of the ball bearings sectional committee, A. E. S. C." Accompanying this is a picture of a dignified, prosperous looking, bald-headed business man, which on close inspection shows a good deal of the Strickland of thirty years ago. Too bad he was not at the Reunion to line up with George Anthony, Bob Wallace and Dan Edgerly and other men of today who still show the traits they had as eager youngsters at Technology, laying the foundations of their future successes.

From an article in the *New York Times* of August 19, we clip the following paragraph which indicates that Charlie Winslow is still busy at his chosen job of promoting the cause of public health: "Civilization has gained tremendously from the study of mental hygiene within the past twenty years, it was evident from a report issued today by Dr. C.-E. A. Winslow, Head of the Department of Public Health in the Yale School of Medicine, and President of the Connecticut Society for Mental Hygiene." — ARTHUR A. BLANCHARD, *Secretary*, Room 4-160, M. I. T., Cambridge, Mass.

'99 Arthur Hamilton's diary is continued from the May Review: "August 21: Tom has gone to bed again with a headache. He doesn't yet know that he is seasick and nobody has told him. The girls are not yet on deck. Having time, I naturally start thinking. Of course Tom has not seen the girls yet. He is my guest and I ought to use him well. I suppose this means that I ought not to choose his girl for him, and especially after I have chosen the other one for myself. It worries me a little. It is true, however, that he likes Russians. He says they have overtone, background, and much of the mystery



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that is woman. Her name is not Vodka, but it is stimulating like that. She is of course charming, very dark, languid eyes, and languorous movements, but Hilda is undoubtedly more attractive — to me. I suppose I take naturally to her because she is a big game hunter, has specimens in zoos, museums and other places. Another thing that worries me is that the German General seems to be making a good deal of headway. The Postmaster General is also getting along, and the Captain is no slouch. Hilda says the General has nice eyes, and a sensitive mouth. I do not know whether she told the General what I had or not. Perhaps I haven't got anything, and yet she gives me at least a quarter of the time which she distributes among the four of us, so for the present, why worry? Why worry either about Tom? If he isn't on hand to look out for himself I think I have done pretty well in lining up Vodka for him. I will keep Hilda for myself — if I can.

"Evening same day: I do not know whether Hilda is stringing me or not. After dinner we had a game with two dummies for partners. After the game we attended a movie. After the movie we danced, and after the dance we walked for some time on the promenade deck, stopping occasionally at the smoking room for a cigarette or something. It was on the deck that Hilda told me the story. She was in Africa. She had been trailing lions, was very tired, and went to sleep sitting on the ground with her back against her camel. When she woke up she found a huge lion sitting with his head in her lap and she was scratching his head. She was so amazed, not to say frightened, that she fainted immediately without even shrieking. When she came to the lion stood up and lapped her cheek very tenderly, then turned about and walked into the forest growing gradually smaller and smaller, the center of a diminishing circle of light like Charlie Chaplin's final exit in 'The Circus.'

"August 22: Tommy is up and roaring. I told him he had been seasick and he got mad. Says he never was seasick in his life, and he did a lot of canoeing on the Charles in Tech days so he ought to know. On the other hand he declares that he has always been subject to headache, and that he knows the headache he just had four days of is the same kind of a headache that he has always had. The argument took place in the presence of the group at the Captain's table, and when Tommy denied that he was seasick everybody smiled. Everybody, that is, except Vodka. Vodka just looked at him with large round sympathetic eyes. I know now that I am not going to have any trouble as far as Tommy is concerned about keeping Hilda for myself. Vodka has sold herself to him solidly.

"I want to enter here my protest against the habit of cake eating. Tommy eats cake. I cannot break him of the habit. In fact his entire appetite seems to be contrary to the proper ordering of a dinner. It seems to me that much of the whole art of life is comprised in the way a man eats, and what he eats. Tommy's

manners are passable but queer. The things he wants to put in his stomach are simply awful. I think he must have been brought up on a down east farm where they eat pie for breakfast. Here we are on a German boat and the other night Tommy wanted a boiled dinner. Can you beat it? — and this after two cocktails. Of course he was in bed and seasick and really didn't want anything, but it certainly is embarrassing to a cosmopolite like me to tell the German steward that his friend wants a boiled dinner.

"I am discovering that Hilda puts all her action into words. On the other hand I suspect that Vodka does her act without talking about it. This makes me feel a little as if perhaps I had picked the wrong leddy. I confided this to Tommy who says that it may be Hilda has action for one gentleman, meaning the German General, and only language for another. It was the poet Moody who said he liked a certain girl because he liked to watch her talk. I suppose I am not a poet.

"One whale and several flocks of flying fish are the only things we have seen today.

"August 23: Deleted by Editor. (The Editor sums up the entry by the one word 'progress'.)

"August 24: Morning given up to games — shuffleboard, deck tennis, and Atlantic City. It ought to be explained that Atlantic City is not a game but a place. It is composed of six big basket chairs at the rear of the promenade deck, each wide enough for two, in which there is complete protection from wind, weather, and audience. Atlantic City is very popular. Got a message about Lindbergh over the radio. This sicked the Postmaster General on to tell about Lindbergh. P. G. makes me a little sore because he makes himself out to be an intimate friend of Lindy and other notable people, and thus makes headway on a keel of some other fellow's boat. What I mean is, a fellow ought to stand on his own feet. I have got one over the German General, however, — Hilda likes to dance and the German General does not know how, which means that he has a solitary time during the evenings. Perhaps this explains why his eyes do not look as nice when they look at me as they do apparently when they look at Hilda.

"Tommy does not like to take a bath in salt water. Also he does not like to dress for dinner." — W. M. CORSE, *Secretary*, 810 18th Street, Washington, D. C. A. H. BROWN, *Assistant Secretary*, 53 State Street, Boston, Mass.

'00 If further evidence be necessary to prove that we are gradually passing out of the circle of younger classes, it is furnished by the engagement and wedding announcements of the next generation which are becoming more and more frequent. Howard Dunbar's daughter, Olive, has announced her engagement to Richard H. Barbour of Harvard 1930. Miss Dunbar is a graduate of Milton Academy. The

wedding will be in December. — Miss Katharine H. Fitch and Laurence Godley of Philadelphia have announced their engagement and intention to be married next April. We who attended the never-to-be-forgotten Twenty-Fifth at Osterville recall with pleasure the charming young lady, and to both Miss Katharine and Miss Olive the Class extends congratulations and heartiest wishes. — Invitations are out for the wedding of Miss Helen W. Vincent to Edmond E. Russell, '24. Russell is plant engineer for the New England Telephone and Telegraph Company with headquarters at Providence. His father wears his new honors with his usual becoming modesty.

Recent newspaper accounts of the American Whippet Derby held at Wenham, Mass., this summer, mention the performance of Joe Draper's whippet, Lion, winner of third place in this classic sporting event. Joe has been prominent for several years as an owner of blue ribbon running whippets. — Bowditch summered at Chocorua and reports a visit from Dick Wastcoat who was visiting a daughter in camp at Lake Asquam.

Stanley Fitch spent his vacation in Europe with his family, traveling through England, Holland, Germany, Switzerland, and France. While in Paris he attended services at the American Pro-Cathedral where George Gibbs is Canon in Residence. Much to his regret George was away on a vacation, but the service proved one of the greatest thrills of the trip.

Under the personal items of the June 2 issue of the *Engineering and Mining Journal* appears a short statement to the effect that D. S. Johnson is with the Black Range Mining Corporation of Santa Rita, New Mexico. — GEORGE E. RUSSELL, *Secretary*, Room 1-272, M. I. T., Cambridge, Mass.

'01 Owing to an oversight for which your Secretary declines to assume the responsibility, the Class Notes which are sent out early in the summer, have just been circulated. As a result, only a few responses have been received, but the poignant facts which they contain will be spread before you for your edification.

One reply which has been received has rather puzzled me and I am printing it in these notes and asking for a response from any member of the Class whose reaction is similar to that of the writer. I quote: "Like myself, I find a great many alumni of various institutions are exceedingly tired of the follow-ups, papers, magazines, and so on. Most of them are a bit shy about expressing themselves except in private. This is strictly in private. I should think that those in authority would take a hint, when only three respond to a request for funds and only twenty-two pay dues. Kindly add my name to the addresses wanted and in that way you will cut down the deficit on the financial statement." Waiving minor inaccuracies in the statement as presented, I am genuinely interested in the writer's point of view. That it represents



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a definite standpoint, I think the writer's sincerity leaves no doubt. I am interested to learn how far this may be regarded as representative of a fraction of the Class. Judged by the reports of the Alumni Office, the Technology Alumni as a whole, show, perhaps, a keener interest in Institute affairs than most of the other large alumni bodies. This, too, without any elaborate campaign to arouse interest or any continuous ballyhoo. There are always individuals whose contacts with an educational institution leave them indifferent, or frankly antagonized. There are some members of the Class with whom I have had personal contact who, for real or fancied grievances, still manifest a frank bitterness toward the Institute. There are others, again, whom I have found indifferent. But the total number is a very small one. If you chance on this, I wish you would drop me a postcard at the expenditure of one cent, and several dollars worth of your time, and tell me if you subscribe to the above sentiments, or if you disagree with the writer. One hesitates to be a nuisance, even to a former classmate, though instructions to be an efficient secretary would seem to solve the problem of future communications. Frankly, I should like to know, and I shall appreciate any information offered me by any candid member of the Class, who has sufficient interest to take the time.

George Fisk, at 829 Bird Avenue, Buffalo, N. Y., is Commissioner of Public Works for that city. The Department is inclusive and consists of divisions of Engineering, Buildings, Streets, and Water. — Chester Chubb, concerning whom comment was made last year in these columns, is to be found at the Gas and Electric Building in Lincoln, Neb. Chester is President of the Iowa-Nebraska Light and Power Company, with headquarters in Lincoln. The company operates in approximately one hundred towns in eastern Nebraska, sixty in southwestern Iowa, and thirty in northwestern Missouri. It supplies electric lights and power, gas service, central heating plants, and ice plants to these 200 communities. He is also President of the Lincoln Traction Company, which supplies transportation over a rather wide area about the city of Lincoln. Quite a large number of the Class have apparently gone into this massive form of service corporation dealing in public utilities. Even the Strawberry King has forsaken the sylvan haunts of the tight little State of Maine — used in the nautical sense — and is supplying a large part of the State of Virginia with bigger and better electric lights and ice boxes.

Many of you have undoubtedly seen Lammot du Pont's open letter relative to the present political situation. The article was syndicated and I imagine most of you have chanced upon it. Lammot, without prejudice to the well-defined views of other members of his family, is out for Hoover on the basis that the latter's election will connote a better level of business prosperity and greater economic independence of the country at large.

He writes me that he is enrolling for the Thirtieth Reunion, so we are already assured of at least two participants. Lammot is President of E. I. du Pont de Nemours and Company, a post to which he was elected a few years ago.

Bob Williams is still engineer for the Submarine Signal Corporation. His work is primarily research in the field of submarine signalling. His industry is attested by the fact that about sixty patents are recorded in his name. One of his most recent activities has been participation in development of the fathometer, a device which measures the depth of water under a vessel, by determining the length of time for sound to be reflected from the bottom of the sea. An article describing this device was recently syndicated in the daily press and it is adjudged by competent nautical experts to be a very great step forward in aiding safe transportation. Bob's work has involved a vast amount of traveling, and as a result, we can catch him only at odd intervals between trips. His class data sheet, so he tells me, was written in Halifax Harbor during one of his recent sojourns. He ends his missive with a dirty dig about the Class Secretaryship, which, as you will remember, he held for thirteen years. Well, I may feel as he does when I have rounded out as long a span of service as that, but at the present time I am free to confess that I enjoy both the friendly words which meet me from individual members of the Class, and equally the scathing criticisms of my English, my imagination, and particularly my method of presenting financial statements, which from time to time I receive from well-wishers. And, at that, I think that Bob enjoyed it, too, during his many years of faithful and efficient service.

Early in June word reached the Secretary of the death of Mrs. Louise Brush, Matt's mother, who for many years was a resident of Boston. Her loss will be a heavy one to Matt, and I am sure the sympathy of the Class goes to him in his bereavement.

Next month I shall hope to have a full tale of news from many of the missing. My greetings for the winter! — ALLAN W. ROWE, *Secretary*, 4 Newbury Street, Boston, Mass. V. F. HOLMES, *Assistant Secretary*, 131 State Street, Boston, Mass.

'02 The annual outing of the Class was held at Boxwood Manor in Old Lyme, Conn., Friday, June 15 to 17, with perfect weather throughout. Jimmie Brown and his wife were the first to arrive with Monte and Mrs. Montgomery following. Clyde Place drove up from New York, arriving early in the afternoon and repaired at once to the golf links. Mathesius with Mrs. Mathesius and Miss Eleanor came soon after. The next arrivals were the Secretary with Mrs. Hunter and three young Hunters who had pushed the class car, "Tootie," down from Boston. Lewis Moore and his wife drove in soon afterward. Murray Walker breezed in just as the party was starting

dinner, and Mrs. Place, who had come all the way from Chatham, Mass., arrived soon after. Just as dinner was over Steve Gardner with Mrs. Gardner and Miss Florence drove in from New London to spend the evening. Bert Hathaway with Mrs. Hathaway and Miss Mary, who arrived during the evening, completed the party. The Gardners returned to New London for the night, but were over for both Saturday and Sunday. Cards, music and general conversation filled out the evening.

Saturday most of the classmates put in on the links, while the young people played tennis. This was followed by bathing at White Sands Beach and a motor ride to Fenwick Point, where the Class has been so often before at the Riversea Club. The honors at golf went to Clyde Place with Steve Gardner giving him a good rub. After lunch on Saturday movies were taken by Mrs. Place in the beautiful gardens of the Manor. After dinner a class meeting was held at which Place was re-elected President, Monte was chosen Vice-President for New York, Ritchie for the Boston District, and Millar for Chicago. Burt Philbrick was re-elected Assistant Secretary. In the evening Clyde Place unlimbered the famous film taken at our Silver Reunion the year before, which was shown to an appreciative audience. Those who were seeing it for the second or third time were unanimous in saying that they appreciated it all the more on further acquaintance. Place also showed some interesting films that he had made at a winter outing in the Berkshires.

Sunday forenoon Roy Brainerd and Mrs. Brainerd drove down from Middletown and had dinner with the party. The outing broke up on Sunday afternoon, the members returning to their homes by motor. All agreed they would be on hand next year, and assured the presence of at least one other classmate at that time. The date for next year's outing was definitely fixed as June 14 to 16. The place will probably be the Riversea Inn, Fenwick Point, Saybrook, where the Class has had so many enjoyable outings in past years.

Monte dropped in on the Class Secretary the last of August while motoring back to New York after a vacation spent near Brunswick, Maine. He reported seeing Nash, Robinson, and Stover, who were summering in the same region, as well as Mrs. Bernard Capen. — McKech-nie is in charge of the mill work for the Kittimac Mines Corporation of Denver, Colo. He has developed a new flotation process of working the ore from an old mine near Silverton, Colo., which will enable this mine to be operated profitably. The mine had not been worked for many years as the ore could not be treated economically by older methods.

Robie has moved from West Hartford to 17 Evergreen Avenue, Hartford, where he will be within walking distance of his office with the National Fire Insurance Company. — Kellogg has moved his residence from 49 East 92d Street to 1088 Park Avenue, New York City. — Barry,

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who has been in France for a number of years in the work of registering graves of our soldiers who are buried over seas, has returned to Washington. His address is Major Henry B. Barry, Room 2202, Munitions Building, Washington. — The Secretary attended the annual convention of the American Institute of Quantity Surveyors in New York the last week in June. He was re-elected first Vice-President of the Institute and was appointed Chairman of the Committee on Uniform Methods. — **FREDERICK H. HUNTER**, *Secretary*, Box 11, West Roxbury, Mass. **BURTON G. PHILBRICK**, *Assistant Secretary*, 246 Stuart Street, Boston, Mass.

'03 They began drifting in Friday night and kept on coming till Sunday morning — seasoned, purposeful men, the world might call them, but actually a gang of over-grown boys, the same who twenty-five years before had listened to inspiring speeches in Huntington Hall and then filed past Prexy Pritchett to receive their degrees as Bachelors of Science. No mention, however, was made of degrees at Kittansett, and the fleeting quarter century received but passing comment. No indication was found of the grizzled veterans forecast by the prophets of 1903. Instead, there foregathered a group of active men looking backward only to profit by rich experiences, to enjoy the recollection of human contacts and treasured friendships, and looking forward with sturdy resolution to the most useful parts of their careers.

Some brought their wives and those who did not were sorry. All brought a buoyant spirit and that understanding of one another which follows only early contact and makes men feel like brothers even after years of separation.

In the perfect surroundings, secured by Aldrich and his efficient committee, the festivities went off without a hitch. The location of the Kittansett Club is all in picturesque beauty that one could expect on Cape Cod, and the facilities offered, including the exclusive use of the clubhouse, two of the cottages, and the golf links left nothing to be desired.

The early arrivals on Friday night chatted the evening away before a great open fire in the clubhouse. After breakfast, Saturday, they found their number augmented by new arrivals and the whole day was punctuated by boisterous greetings as more and more 1903 men appeared. Even the rain and Cape Cod fog of Saturday morning was scarcely noticed by the enthusiastic reunionists who played bridge or poker, swapped yarns of by-gone days, and discussed the absorbing problems of sons and daughters ranging from the cradle to Gleason's boy who is taking his Ph.D. from Princeton this year.

After luncheon, Saturday (and the meals were beyond description; that strawberry shortcake makes the scribe's mouth water right now), some played golf in a contest won by Stiles "hands down," and others motored to Colonel Greene's famous estate at New Bedford

to see his relics of old New England. A bit of cards, small talk before the fire and a stiff baseball game between the married men and the so-called single fellows put the gang in fine shape for a jolly dinner. The final score of the game is not known, but both sides were well captained. Howes, with his historical baseball shirt with "M. I. T. 1903" emblazoned across its front was a formidable leader of the married team, while Whitcomb captained the single men so well that they scored the larger number of runs.

At dinner, a hearty, delicious, New England feast, Jim Doran made himself a rock of Gibraltar with the ladies by presenting each with a Danbury hat, each as soft as a puppie's ear and of the delicate tint most suitable to the complexion of the recipient. Jim, we take off our hats to you. Your position with our wives is unassailable. You've kissed the Blarney Stone all right, all right.

The class meeting was held before a roaring fire on Saturday evening. Business was quickly finished. Finances are in good shape. Aldrich refused to continue as Secretary and was given a well deserved unanimous vote of thanks. He has done a splendid thorough-going piece of work. His records are in perfect order. He has labored hard to procure and publish news and his hard-working energy has in large measure made possible and successful the reunions we who have attended have found so enjoyable. The class owes him a debt of gratitude. F. A. Eustis was elected to succeed him, and Cushman was elected Assistant Secretary.

After business had been set aside, classmates reminisced. You who read this, if you attended Technology with the Class of 1903, were asked for and the information was supplied by whomever happened to have seen or heard from you. News was eagerly received and there were few who were not heard from indirectly. Not only were you mentioned — you were missed. When next 1903 gathers together it is to be hoped you will be there. All who visited Kittansett voted the excursion well worth while and instructed the new Secretaries to arrange a yearly reunion. So let's begin to plan now for the good time a year hence. If you were unfortunate enough to miss this one, come to the next. Try it out, it's worth a trial. As for the gang who traveled to Kittansett this year, they'll be sure to come anyway. Listen to what one of the wives says about it. If you don't want to come next year, don't let your wife read this:

"All who were there had a most enjoyable outing of pleasant company, good accommodations and delicious meals. But best of all was the opportunity to become acquainted with the boys who shared the long hard grind — who worked and dreamed together in a day when Technology had little to offer except work and dreams. They have made good. By their success, their wives and their children, shall they be judged. We had a great time comparing notes and life history — and we were sorry you could not all be there. I only want to say

to the boys for the wives who were there 'We are glad of the privilege of sharing this big occasion. We are proud of every one of you. May you live long, prosper, and grow younger as you grow older.'"

Those present were: C. S. Aldrich; J. R. Bates; Mr. and Mrs. J. F. Ancona; Mr. and Mrs. L. B. Gould; Mr. and Mrs. I. T. Haddock; Mr. and Mrs. H. H. Walsh; Mr. and Mrs. A. B. Allen; Mr. and Mrs. J. F. Doran; Mr. and Mrs. R. H. Nutter; S. A. Foster; C. M. Joyce; W. P. Regestein; Mr. and Mrs. G. M. Greene; Mr. and Mrs. G. H. Gleason; Hewitt Crosby; H. A. Stiles; W. L. Wing; F. G. Cox; Mr. and Mrs. K. D. Jewett; W. H. Whitcomb; Mr. and Mrs. R. H. Howes; Mr. and Mrs. I. F. Atwood; M. H. Clark; Mr. and Mrs. F. B. Crosby; J. A. Cushman; Walter Whitehead and F. A. Eustis.

Hewitt Crosby writes that he saw Josephine at Tucson, Ariz., in April, and also that Sheafe has a fine ranch and winter home in Casa Grande, Ariz.

Ball writes: "I have a daughter graduating from college in June, and her mother's twenty-fifth anniversary from the same college comes at the same time." This prevented his getting to Kittansett. Newman couldn't come for a different reason: "I will be in New York on June 2 with my wife and daughter to sail on the White Star liner *Cedric* for Liverpool."

Kehe wrote: "Since leaving the States in 1912, I have lived abroad most of the time — Mexico for two years; Congo Belge seven years; then a period at home until I came to Messina. Africa is a rather attractive place to live in, in spite of its drawbacks, especially for women. The servant question does not exist, and with a little training, the natives make excellent servants. Also, the living is cheap, the best hotels charge only \$5.00 a day inclusive. The hunting is very fine, and this is the best lion country I have seen yet, but I have not yet got my lion. An occasional stray American wanders up here, the latest being Professor Graton of Harvard, but we are off the beaten path, so we do not see many."

From Beverstock we heard: "I have one son, Roswell, who is in Stanford. He is only six feet tall, but he is a big boy. We have a nice machinery business here in Los Angeles and in San Francisco. I was in the contracting business for years, but have now given that up."

Cushman has seen Bateman at Claremont, N. H., and King at Bedford, Mass., since the reunion, and both expressed regrets at missing out. Bateman has been twenty-five years with the Sullivan Machinery Company, and King is starting a rubber softening business of his own for which he expects a great future. — **FREDERIC A. EUSTIS**, *Secretary*, 131 State Street, Boston, Mass. **JAMES A. CUSHMAN**, *Assistant Secretary*, 35 Harvard Street, Worcester, Mass.

'04 At the time these notes were written the vacation season was not so long past that vacations were but memories as may be the case when the notes are read. In any



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event the Secretary entertains the hope that all the readers of these notes enjoyed their vacations as much as he did himself, and that the two months which have elapsed since most vacations concluded have not worn off the good effects produced during the holidays.

The annual Reunion was held at East Bay Lodge on June 22, 23, and 24, and although the attendance was the smallest yet recorded, all those present enjoyed it to the utmost. In accordance with his usual custom, Jupiter Pluvius attended the first day and saw to it that there was no dust flying anywhere. Saturday was cloudy but without rain, and the Class forsook its old love, the Wianno Golf Links, and played at the new Oyster Harbor course. No attempt was made to hold any tournament as there was not a sufficient number present, but the new course was thoroughly enjoyed.

On Saturday night the moving pictures taken by Tammie Rockwood at the preceding Reunion were presented, and from the remarks heard it was very evident that Bobby Jones would have been very much surprised had he seen the form displayed by some of our classmates. Some discussion was held regarding the Twenty-Fifth Reunion to be held next June, and it was thought advisable to hold it earlier in the month than has been our usual custom. The tentative dates are June 7, 8, and 9, in order that the Reunion may fit in more closely with the Commencement activities at the Institute, as it was felt that this might be an incentive to some of the members to attend.

A committee consisting of A. M. Holcombe, Chairman, C. Y. Ferris and M. L. Emerson, was appointed to take up the matter of a class gift to the Institute as a memorial of our Twenty-Fifth Anniversary. Further details regarding this and the Twenty-Fifth Reunion will be forthcoming at later dates. Those attending this year's Reunion were Munster, J. H. Draper, Dennie, M. L. Emerson, Haley, Parker, Ferris, E. H. Russell, Jr., P. S. Sweetser, Sutton, Holcombe, and the Secretary. Charlie Haynes got as far as the luncheon held at the University Club on June 22, but was unable to proceed further.

Tammie Rockwood and Mrs. Rockwood attended the Kiwanis Convention at Seattle and were away from home the whole month of June, so Tammie was prevented from attending this year's Reunion. He very kindly furnished his motion picture projector so that the moving picture show was given in spite of his absence. — Soon after May 1 a letter was received from Charlie Haynes indicating that he felt it was safe to write, seeing that no more Class Notes would be published during the summer. In deference to Charlie's wishes his letter will not be printed. He did, however, state definitely that he intended to attend the Reunion if for no other purpose than to cast his vote against the wives attending the Twenty-Fifth Reunion. Charlie was not present so he was unable to cast a vote, and his objections have gone by the board.

On April 19 A. D. Smith called the Secretary on the telephone and said that he was passing through the city and wanted to register the fact. He stated that he had been in Europe for the past six years as Vice-President of the Jenkins Petroleum Process Company, and that his business had called for his presence in all parts of Europe building refineries for his company. At that time he was on his way back to Europe for a stay of three to six months. Under the date of June 9 he wrote the Secretary the following letter which is quite interesting. "I regret that I shall not be able to attend the present Class Reunion, but I will certainly make the attempt for 1929, and I enclose the assessment desired. The scarcity of news about 1904 men in *The Review* seems to be a very regular feature, but possibly many are like myself and have never taken the time to contribute. Anyway I have some excuse as I seem to keep on the move pretty much of the time. I came to Europe seven years ago on a consulting engagement that I expected would last two months, but it was six years before I returned to the States, and in the meantime I have managed to see a bit of France, Belgium, Holland, Switzerland, Italy, Spain, Germany, besides North Africa from the Pacific to the Suez.

"As you may recall I passed through Boston in early April on my way over again, and landed in France April 30, with spring in the air with all the delightful softness of effect that France can give when it chooses. It has been perfect weather here in England for the last two weeks, which is somewhat of a record. Business here is poor, the effect of the general strike and the coal strike of last year being still felt; but Britain works the harder when she is a bit hit, and gradually mass production is coming in. We could learn much from her when it comes to banking, so that all in all, this part of the world is not so moribund as some authorities in the States would have one believe.

"Personally, I manage to make a living by doing a little consulting here, and drawing some royalties from some patents there — all connected directly or indirectly with petroleum refining. Shortly I expect to visit Roumania, and shall take the long route through old Transylvania, this being the part of the world where George Barr McCutcheon got his ideas of Graustark. It is also where werewolves and vampires thrive, to say nothing of a few castles and mountain bandits, so it promises plenty of interest. I think I had best close, and I wish this year's Reunion a success and the Twenty-Fifth superlatively so."

As is usual the notices for the annual Reunion brought in some letters and bits of news about various members of the Class. Magnuson wrote a line stating that he had just returned from a four month business trip to India, but gave no further particulars regarding his travels. — Captain L. B. McBride, U. S. N., was at that time on duty at the American Embassy in Mexico City. —

We still have one classmate who is a citizen of Florida. Trowbridge wrote the following letter which explains why he was unable to come to the Reunion: "I wish I might be with you at Osterville to meet again some of the classmates whom I have not seen for several years, and to enjoy the good time which I am sure you will have there. This is my fourth summer in Florida, and I have not been to Massachusetts since 1926. I do not expect to be able to get away from here this summer as the citrus growers are working very hard now to establish a Clearing House Association which will enable them to market their fruit to better advantage, and as I am chairman of the committee covering this section of the state, I am doubly busy in this connection. There are some 13,000 growers, having an investment of more than 250 million dollars in groves which bring into the state in the neighborhood of 50 million dollars per year. It is Florida's largest industry.

"We have our primaries here the fifth and it seems that nearly everyone is running for some office. I have found no evidence as yet that votes have gone up in price but we have hopes and some of the wise ones agree with Will Rogers when he said that it is a tough year for the voter as votes never brought as little as they have this year, and it hardly pays a man to vote."

A letter from Selby Haar stated that he had seen several of the classmates at various times, including R. B. Williams, Peiler, Dave Elwell, and Mert Emerson. Haar is still connected with the Board of Transportation of the City of New York, and his particular branch is that of equipment. He stated that the subway system when completed will have cost more than six hundred million dollars and that work is progressing exactly on schedule, and that it was hoped to have a considerable portion of it in operation by 1930. He has a considerable force of men under his supervision and states that a good many of them are Technology men of later years.

The latest and most interesting bit of news received regarding a classmate was that of the appointment of Bernard Blum as chief engineer of the Northern Pacific Railroad, which took place on August 20. The following clipping gives the salient facts regarding Bernie's career. The clipping also contained a very good picture of Bernie from which it appeared that he has changed very little from his appearance on his graduating day except that he now wears spectacles instead of the eye glasses we all remember so well. "Bernard Blum, who has been promoted to chief engineer of the Northern Pacific, with headquarters at St. Paul, Minn., has been in the service of the engineering department of that railroad since 1907. He was born on February 12, 1883, at Chicago, and was graduated from a course in civil engineering at the Massachusetts Institute of Technology in 1904. The following year he was an assistant instructor in that school, entering railway service in June, 1905, in the engineering



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department of the Chicago Junction at Chicago. Mr. Blum entered Northern Pacific service on March 1, 1907, as an assistant engineer. He was then advanced through a number of minor positions in the engineering department and on January 1, 1917, he was promoted to district engineer of the lines east of Mandan, N. D., with headquarters at St. Paul. On July 1, 1919, Mr. Blum was promoted to engineer of maintenance of way on the lines east of Paradise, Mont., with headquarters at St. Paul, a position he held until his promotion to chief engineer on August 20."

The Secretary feels very well satisfied with the crop of Class Notes for this issue and again expresses the hope that a perusal of these notes will stimulate the ambitions and minds of many classmates to sit down and write him a letter that he may use for groundwork for succeeding issues. — HENRY W. STEVENS, *Secretary*, 12 Garrison Street, Chestnut Hill, Mass. AMASA M. HOLCOMBE, *Assistant Secretary*, 3305 18th Street, N. W., Washington, D. C.

**'05** The excitement in Newburyport, Mass., over the doings of Mayor "Bossy" Gillis has been well covered, throughout the East at least. For those in the sticks, the latest fight was over his building a filling station on a residential street without a permit. Ed Coffin swore out a complaint which landed the "bad boy Mayor" in jail. Whereupon the Mayor charged Ed with reckless driving and, by gum, got him convicted. The end is not yet in sight. We haven't heard of his spending any time in the caboose, but then we do not see the Boston papers regularly, and Ed won't tell.

On July 1 Jim Barlow became city manager of Portland, Maine. We have always rated Jim a good looking fellow, but the picture in the Boston *Globe* made him look like a graduate of the Concord Reformatory. Since resigning as city manager of New London, Conn., five years ago, he has been in the manufacturing line in New London and New York.

Gorham Crosby represented the Perkins Glue Company in the case *Holland Furniture Company vs. Perkins Glue Company*. The case was settled on May 12, 1928, by the Supreme Court of the United States, on a writ of certiorari to the United States Circuit Court of Appeals for the sixth circuit. In reference to the above Hub Kenway wrote: "This case was decided against Gorham, but he had Mr. Hughes traveling so fast his whiskers were straight out behind."

Sid Strickland dropped in on us in June to see whether the chemical laboratory which he had designed for Beyrouth was any better than ours. We had a nice visit. Sid is now a member of the School Board for the Town of Brookline. A year or so ago he was beaten out by a few votes by Bill Reed, the old Harvard football captain. But apparently Sid's friends were persistent. His oldest son is now a student at the Yale School of Architecture.

Bert Johnson explains the move re-

ported in the last issue. "I have had a few changes in occupations in recent years which may interest you. In November 1924 the United States Geological Survey sent me down to Rockland, Maine, to work out the geological structure of the limestone area at that place, and I was there about a month. Back in Washington again after that. I think it was in 1925 that the Division of Mineral Resources of the Survey in which I was working as a section chief in charge of the Section of Foreign Mineral Reserves was transferred to the Bureau of Mines. The foreign work had a very precarious existence for the next two years and was finally given up except for the collection of some foreign mineral production figures. I was then assigned to work in the Economic Branch of the Bureau of Mines on phosphate work. This was about January of this year. Later it was suggested that I take a trip to the Tennessee and Florida phosphate fields and I left Washington about the middle of April, visiting the Tennessee fields and then coming down here. Tomorrow I go out to the phosphate mines, and in the next two weeks or so I will visit all the working ones and the one remaining phosphate shipping port which I have not seen — South Boca Grande — and then back to Washington.

Driving into Middletown one day from a sojourn in New Hampshire, we were surprised to see Bill Green trudging along. He explained that he was in town to arrange for his boy's admission to Wesleyan. Later, in September, he came down to get him settled, but Bill had miscalculated and was a day ahead of the boy. — In regard to Dan Adams, we have had the following note from Mrs. Dan, who, it seems, lives with her husband at 2019 Seneca Street, Ann Arbor, Mich.: "Dan spends his time tearing around the Middle West doing engineering from an office in Chicago. He keeps the old hat he can't bear to throw away, his golf clubs and his family in Ann Arbor because it is a lovely spot."

George Rhodes and Ford, Bacon and Davis have moved from 115 to 39 Broadway, New York. — Warren Loomis is a director of a newly organized bank in Needham. — Carl Graesser has taken up yacht racing, sailing *Wadun* in the Indian class at Southport, Conn. — George Fuller, who has been in Fort Worth, Texas, for some years with the United States Bureau of Public Roads, has been transferred to Omaha, Neb. — We saw one of Eliza Newkirk Rogers's houses recently in Wellesley and it looked good. — Frank Riley has three boys and four girls. Who can beat that? Most of the boys have quit their announcements but Fred Goldthwaite still sends out a babygram every once in a while. — Salem End, Mount Park, Harrow-on-the-Hill, Middlesex, England reads like a timetable but it is Walter Bent's address. Once he could write simply Framingham, Mass. — Walter Eichler seems to be living in Keene, N. H. He has thoughtfully refrained from bothering us with details. — Ralph Tarbett was in

El Paso, Texas, with the United States Public Health Service for some years. For a few months he was in Norfolk, Va., and was then transferred to Washington, D. C.

Harry Wentworth wrote in September, "I have just got back on the job after a very strenuous week as division marshal at Brae Burn, where I also had charge of the distribution of the several hundred marshals, during the National Amateur Golf Tournament there. It was a beautiful sight on Saturday with 8,000 people watching the match, and the best behaved group of people that I ever saw in so large a mass. Handling the work on the field the last two days made one think of old times at Technology."

Ros Davis has a little personal story to tell. "After Gilbert Tower tried to get me seasick off Cohasset in the spring of 1905, and failed, I thought I was an old salt and have ever since wanted to have a big sail on a little boat. Now I've done it. This summer I was fortunate enough to be one of the crew of *Duckling* in the ocean race to Bermuda. As we crossed the starting line at New London I beheld Charlie Boggs on *Black Goose* whom we slowly left behind. I saw him next as we sailed into Hamilton Harbor. They had licked us. *Duckling* was the smallest in the class, thirty-seven feet over all, jib-headed sloop rig and had won the ocean race to Cape May in 1927, so they were all watching us. For four days we were up with the leaders, as we learned later. No boat was in sight when we passed Montauk the first evening, but then we ran into the calmest calm anybody ever saw. For twenty-four hours we lay slapping with sails furled, a painted picture, and when the breeze came, were further from Bermuda than before. But we all had the satisfaction of a swim 150 miles from the nearest land. Had there been a prize for the shortest day's run, we would have taken it without competition. This had something to do with our coming in among the last, but it's all in the game. We had a fine sail of six and a half days, and something over 660 miles with Mother Carey's chickens, flying fish, Portuguese men-of-war, and blue water.

"It was my first visit to the island and thoroughly enjoyed. There was a grand dinner at the Belmont, chosen perhaps because it was not a 'temperance hotel.' It was full of yachtsmen and their friends. As the evening wore on, there was a most interesting example of informal singing, sea chanties, and so on. One young sailor, who had joined our group, came out with 'Take Me Back to Tech,' which was sung with gusto by five at least. Which reminds me that our race was won by a Technology man, and for that matter, there were three on our boat.

"The official measurer at New London looked so familiar that I knew him at once, a Course XIII man who was in one Tech Show with me, and I hadn't seen him since. Charlie Boggs rowed over to call one morning as we lay off the Royal Bermuda Yacht Club. One of the high lights of the two day stop was a

thirty mile bicycle ride around the island, and strangely enough it didn't kill any of us, though keeping to the left was quite a strain.

"There was only one night of rough going, on the way back, when we ran for twelve hours under storm jib and got pounded enough to keep all hands from peaceful sleep. Ordinarily I found, to my surprise, that I could flop onto a bunk or a pile of junk at any time and get a good nap. If you like this sort of thing, you'd like it a lot. If not, I'd suggest you stay nearer shore." — ROSWELL DAVIS, *Secretary*, Wes Station, Middletown, Conn. S. T. STRICKLAND, *Assistant Secretary*, 20 Newbury Street, Boston, Mass.

'06 The only item of news which has come to the attention of the Secretary is the brief notice that J. M. Buchanan is now with the Brooklyn Edison Company of Brooklyn, N. Y. Card records indicate that Buchanan has been with the New York Telephone Company since graduation.

Due to the pressure of the regular job and some outside time devoted to improving one's golf game, Class affairs have rather suffered the past summer. Now that the fall season is upon us it is promised that more activity will be shown. The Secretary acknowledges the interest on the part of some members of the Class in the dormitory drive. This is very gratifying, but there are many who have not yet subscribed. This is the foremost business of the Class, and steps are to be taken to round up the delinquents. — J. W. KIDDER, *Secretary*, 8 Harrison Avenue, Boston, Mass. EDWARD B. ROWE, *Assistant Secretary*, 11 Cushing Road, Wellesley, Mass.

'07 Lawrence Allen, executive in the experimental department of the United Shoe Machinery Company, Boston, has changed his home address to 6 Stonehedge Road, Andover. — Sam Coupal is now mine manager of the Arizona-Eastern Gold Mines Company at Octave, Ariz.

In the July, 1928, issue of *The Review* some facts were given regarding the death of Vernon Rood. Since then the following clipping from the *Engineering and Mining Journal* has come to us, and in view of Vernon's wide acquaintance and popularity among '07 men we quote it in part: "Vernon Stone Rood, general manager of the Utah Apex Mining Company, Bingham, Utah, who died on May 1 at Saranac Lake, N. Y., was prominent in the brilliant group of younger mining men and metallurgists so successful in the development and application of modern methods and processes in Utah. On graduating from the Massachusetts Institute of Technology in 1907 Mr. Rood obtained employment as a miner at the Daly West Mine, Park City, Utah, and the following year went to Bingham where he worked as a machine miner for the Utah Copper Company. His first association with the Utah Apex property was in 1909 as an employee of the contractor who opened the main shaft. . . .

On completion of this work he entered the employ of the company as a machine miner. He was promoted to superintendent in 1912 and to general manager of the property in 1916.

"Mr. Rood, during the administration of R. F. Haffenreffer, Jr., President of the Company, was largely responsible for the development of the mine from the prospect stage, when it bore heavy financial obligations, into a substantial dividend payer and one of the best-equipped properties in the state. . . . In spite of the handicaps created by involved litigation, to which the Company was a party, and when, for a long period, operations were carried on largely to meet conditions demanded by the attorneys, Mr. Rood demonstrated his ability as a mine manager by making the Utah Apex one of the largest individual lead producers in the country.

"Indicative of the changing methods and improvements necessary to keep abreast of conditions is the fact that during Mr. Rood's connection with the Company the mill of Utah Apex was reconstructed four times. . . . His illness made it impossible for him to give his personal attention to the most recent plant changes, but he kept in touch with these and with all operations at the property, through the medium of correspondence, until within a few days of his death. . . . Vernon Rood was an able engineer and executive, a good citizen, and a steadfast friend. He met his long illness and death with the patience and fortitude that was to be expected from a kind and courteous gentleman."

Merton W. Sage is a member of the law firm of Pennie, Davis, Marvin and Edmonds, at 165 Broadway, New York. Mert attended Georgetown Law School from 1909 to 1912, receiving the degrees LL.B. and M.P.L. and was a patent attorney with the General Electric Company until 1917 when he became associated with the New York firm. He has two daughters and a son, and resides at 10 Westway, Bronxville, N. Y. — Like most of the Course IV men, Frederic B. (better known as Freddie) Schmidt has stuck to architecture. He has had several connections during the past twenty-one years, but since 1923 has been in business for himself (office at 161 E. Erie Street, Chicago) and has had a good measure of success. Fred has two children — Henrietta, thirteen years old, and Frederic P., eleven.

Although it is probably not generally known, an '07 man has had a good deal to do with the successful production of Gillette Safety Razors. We refer to Theodore L. Smith, who since 1918 has been production engineer for the Gillette Company at the factory at 47 West First Street, South Boston. Smith lives in Concord and has three children. — Another architect who has stuck to it is Winsor Soule, senior partner of the firm Soule, Murphy and Hastings, at 116 East Sola Street, Santa Barbara, Calif. Winsor has been active in professional architectural societies, and also has been a public spirited citizen of Santa Barbara,

having been Chairman of the Board of Park Commissioners from 1924 to 1927, President of the Y. M. C. A., and President of the Salvation Army Advisory Board. In home life Winsor unfortunately has not been so well blessed, his second wife having died in September, 1927, and there being no children.

Herb Spear is one of the few men in our Class who has stayed through all the years with the same firm he started with in 1907. He has been with Brown Company in Berlin, N. H., as chemical engineer, department head, and since 1920 as sulphite superintendent. Recently he has been doing important research work in the development of Alpha Pulp, the new substitute for rags in the paper industry and for rayon. Herb is married but has no children. — BRYANT NICHOLS, *Secretary*, 2 Rowe Street, Auburndale, Mass. HAROLD S. WILSON, *Assistant Secretary*, International Shoe Company, Manchester, N. H.

'08 Our Twentieth Reunion was held at West Bay Inn, Oyster-ville, on the Cape, June 15 to 18. This was our third visit to West Bay and I think all will agree the most enjoyable, for we had the most perfect weather for four days anyone could wish for. The advance guard, our Three Musketeers, Cookie, Mayo, and Ferrandi, left Boston by automobile Friday noon to post route signs to the Inn, and were ready to welcome the gang as they showed up.

By dinner time there was a quorum present and dinner was a great success. Others arrived during the evening, and by the time the bridge players were getting busy the following fellows were on deck: Wemple, Joy, Mayo, Cook, Carter, Gary, Elton, Handy, Coffin, Newhall, Kennison, Batsford, Belcher, Booth, Burch, Tim Collins, Toot Ellis, Esten, Ferris, Glover, Leslie, Longley, Luther, Lyons, Putnam, Sampson, Thompson, Towle, Ferrandi and Beede. There were many thrilling rubbers played, and apparently our Class has many bridge experts, but honors went to Luther and Sampson who defeated all comers.

Saturday morning after an early swim by some of the huskies, and a good breakfast, the golfers started out on the Wianno course. The royal game has made several converts since our last reunion, so there was no trouble in getting half a dozen foresomes going. The greens and fairways were in excellent condition and some very creditable scores were made, considering that some of us insisted in making most of our shots from the rough. The water hole on the ninth seems to have lost its terror and it is doubtful if more than a dozen balls were left there.

During the day Clark, Chandler, Merrill, Kilburn, Gurney, Ames, Brown, Sewall, Toppa, Gianella and Drake arrived, so by night we had forty-one on hand for the clambake which was served on the beach in back of the Inn. Jeff Beede took movies of the bunch consuming large quantities of clams, lobsters, and so on, while we were attended by our



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fair waitresses. After the last piece of watermelon had disappeared we adjourned to the assembly room where Jeff showed several interesting films and the bridge players got busy. Several cars started for Mill Hill to see the dancing, in fact some of the boys felt young enough to do a little dancing themselves. One of the cars got lost coming home, but finally arrived via Chatham, and a good time was had by all.

Sunday was devoted to more golf, auto trips around the Cape and swimming at Craigville Beach. After lunch some of the fellows went on a boat ride while others lay around and talked over old times. Kedy added one more to our number by arriving Sunday afternoon. The reunion banquet at seven was a great success from the start, and it had a good start, too. The decorations, fancy hats, and so on, were very attractive and the noise makers much appreciated. Toot Ellis as master of ceremonies had little voice left after he had replied to the many speeches of George and Hobe. However, he had voice enough left to present the various prizes in the most fitting manner to those honored. Following the banquet our famous reunion entertainment took place, and as usual, the buried talent which developed was astonishing. However, the couple was finally married in proper shape with the aid of Herb Elton and Ferdi.

Monday morning the crowd began to break away although there were some who insisted that they could better their golf scores by another round or two. By afternoon they were all homeward bound, tired and sunburned, but thoroughly happy.

The following from George Glover since his return home is indicative of the success of our Twentieth: "Just a line to congratulate you and the rest of the committee for the splendid manner in which the Twentieth Reunion was conducted. I assure you that every minute of my time there was well worth while and greatly enjoyed. I am looking forward with a great deal of pleasure to the Twenty-Fifth Reunion five years hence."

From Howard Batsford is the following interesting letter: "Do you think we will remember that Reunion held down at West Bay Inn on Cape Cod last week? I wonder if we will ever be able to forget it, as it was one of the bright spots on an unusually bright class history. Sunlight from start to finish, golf, tennis, sailing, swimming, and auto trips, not to mention the dancing and movie entertainments. The greatest benefit derived from this Reunion, however, was obtained from contact with those fellows whom we have not seen for many years, fellows who have made a name for themselves in the world and are still giving a good account of themselves. Certainly those who were unable to attend this Reunion, either through lack of opportunity or indifference, missed the chance of a lifetime to see college spirit exhibited in no uncertain manner. Men were there from places as far west as Iowa, south as North Carolina, and from the various states in the New England and North Atlantic groups.

"Starting with the ride down from Boston over the wonderful roads leading through the park system, Weymouth, Quincy, and Plymouth, we were all primed for that first supper at West Bay Inn under the watchful eye of Mr. Crocker, our genial host. Friday evening was spent in greeting the new arrivals and touring the nearby town of Hyannis in search of adventure. What with the crowds of people gathering for the weekend and the Monday holiday there was plenty of excitement. Saturday morning brought out the golf clubs and bathing suits, every man of the party being anxious to excel in his favorite sport. Linc Mayo and his genial helpers, Cookie and Ferrandi, had charted the route plainly with large placards advertising that M. I. T. '08 was holding its party nearby. It was also said with some show of credence that Ferrandi poured a libation of pure Italian wine over each new signpost, managing to keep every drop from hitting the ground by adroit manipulation. From Friday evening to Sunday afternoon they came trooping in, men delayed by pressure of business but determined to take a part in what was to them an important milestone in their life. It has been remarked at many reunions that the Class of '08 has been very loyal in remembrance of its class traditions, and this readily showed its truth in the very favorable report of the Class Treasurer, Linc Mayo. He was able to announce that sufficient funds lay in the treasury to allay the extra expense of the Reunion without causing any appreciable percentage drain on the Class as a whole.

"What with the golf and then more golf, auto rides and yachting at Hyannisport, the men were all kept busy up to the time of the clambake. By this time all fellows were restless from hunger, notwithstanding the sizable meals all had managed to put under their belts. Certainly that salt air and spirit of congeniality had made itself felt to a marked degree, for at all meals men like George Glover, Burt Cary, and Ray Drake were heard to ask for everything the fair college waitresses mentioned. That clambake went along all right until Lang Coffin managed to upset himself along with one of the fair waitresses who happened to sit for a moment on the end of his bench. Over went man, girl, and lobster.

"Sunday morning was as bright as the others, and our one real Christian, Ferrandi, went to church to speak for the rest of us heathen. Out came golf bags and cars and the game was on. On went bathing suits and raincoats, and again the game was 'in.' Despite red and sunburned faces the fellows persisted in their endeavors to get all the ozone possible into their systems. The afternoon found many of the men seated in comfortable chairs in front of the hotel, reading the Sunday papers and getting a little rest. Some there were who sped away in autos to inspect the nearby Oyster Harbors real estate development, and to enjoy the hospitality of Zenas Crocker, Jr., a '13 graduate, resident on the island.

"Culminating the entire Reunion was the banquet and entertainment on Sunday evening. Toward this lively climax all roads had been leading, especially through the rooms of Glover, Ferrandi, Cary, *et al.* By the time we all marched into the dining room to the sound of the piano all had been primed for the big feast. Favors of all kinds were lavishly distributed about the table, horns, whistles, bells, balloons and fancy hats to add to the picturesqueness of the occasion. Even the girls were decorated up to match the surroundings and were full of happy smiles. Someone suggested that between the din of the tooters, the playing of the piano, the speeches of George Glover, and the oratory of Toots Ellis as he gave out prizes to the various conspicuous characters, it sounded like the heralding of a new year.

"Monday morning found the large majority heading back for home after a bright and early breakfast, determined to let no opportunity slip when the clarion call was sounded for the next '08 class reunion, be it in one or five years."

The first bi-monthly dinner of the 1928-29 season will be at Walker Memorial, Tuesday, November 13, at 6:30 P.M. Jeff Beede has promised to show the movies which he took at the Twentieth Reunion, and it is hoped that all who can possibly be present will do so. Usual notification cards will be mailed and a prompt reply will be appreciated. — Karl Kennison has been elected President of the Northeastern Section, American Society of Civil Engineers, to fill the vacancy caused by the death of Sturgis H. Thorndike. Matthew Porosky has recently been elected President of Holtzer-Cabot Electric Company. — H. L. CARTER, Secretary, 185 Franklin Street, Boston, Mass.

'09 Here we are back on the job again after the summer's vacation. We hope you all had a pleasant one. Start right now to make your plans for our Twentieth Reunion which will be held next June 14 to 17 at a place to be selected later. We haven't had any class outing since June, 1927, in New York. The Twentieth should be the best ever, and we want everybody back for it.

At this time, when almost everyone is talking politics, comes the announcement that none other than our classmate, Thomas C. Desmond, President of the Young Republican Club and Vice-President of the National Republican Club holds the Republican nomination for Lieutenant Governor of New York.

Last May, Harry P. Trevithick concluded his term as President of the American Oil Chemists' Society, the nineteenth annual convention of which was held in New Orleans. Under Trevithick's leadership the Society has had a very successful year. Trevithick is a consulting and analytical chemist with offices at 2 Broadway, New York.

In the September number of the *Atlantic Monthly* appeared an article by Maurice Scharff titled "The Public and



Their Utilities — Finance, Engineering, and Management." In referring to this article the editors say, "Just as the Federal Trade Commission is investigating the finance, engineering, and management of public utility corporations, Maurice R. Scharff points out some of the reforms which leaders of the industry will do well to adopt if they would avoid eventual nationalization. He himself is a consulting engineer with a long experience in the very business he discusses."

G. A. Joslin has been making examinations of mining properties near Nevada City and also in Siskiyou County, Calif. On his return to Los Angeles he will proceed to San Janvier, State of Sonora, Mexico, to start operations on the Santa Rosa mine, which he and associates of Los Angeles have under option. — CHARLES R. MAIN, *Secretary*, 201 Devonshire Street, Boston, Mass. PAUL W. WISWALL, *Assistant Secretary*, Franklin Baker Building, Hoboken, N. J. MAURICE R. SCHARFF, *Assistant Secretary*, Farmers Bank Building, Pittsburgh, Penna.

**'11** It certainly seems good to be back in an engineering atmosphere again, as is found in the conveyor field, but as these words are being typed there is a certain disappointment in being out in New York State rather than at Technology for the opening of the school year.

What a welcome sight it was to see Charlie Barker, VI, back home from Los Angeles with his wife and young son from his vacation in June. He is still possessed of an inexhaustible fund of dry humor and is still representing the B. F. Sturtevant Company. Rudolph Emmel, III, was also back in Boston in the late spring, but he has returned to Mexico, now being with the United Mines Company at Guanajuata.

From Professor Locke comes the information that James O. Greenan, superintendent for the Consolidated Silver Mines Company, Cortez, Nevada, has left the employ of the company. — Max Kushlan, VI, is engaged in the preparation of an article entitled "Selecting Wire Sizes for Station Service" for *Electrical World*. Ed Woodward, VI, writes of how much he enjoys his work as western mechanical editor of *Railway Age* at Chicago.

W. O. Whitney, V, is now New York sales manager for the Brunswick Kroeschell Company, one of the leaders in the field of artificial refrigeration. — Emmons Whitcomb, XI, and his wife report a glorious European trip this summer and while Emmons was gone the firm of which he is Vice-President, Raymond and Whitcomb, moved its executive offices from Beacon Hill to 126 Newbury Street, Boston.

Right after July 4 word reached us that Stacy Bates, II, had left his apple orchards at Concord, Mass., and is now in Santa Paula, Calif. One can only surmise that he is entering fruit-raising on a larger scale, as we have no definite information. Another classmate who has located in California recently is Ed Blade, VI, who is now at Belvidere.

Lloyd Cooley, X, and his wife had an enjoyable hiking trip through lower Quebec and Ontario in late August. Lloyd writes that he is more than pleased with his work at Harvey, Ill., with the Swenson Evaporator Company. He saw Bill Salisbury, II, in Detroit, recently. — I met Bob Schurig, VI, in Schenectady and he said he had hardly become used to the transfer of his long time sidekick, Oscar Gilcreest, VI, to Philadelphia. Both are with General Electric Company, and up to the middle of this year they had both been at Schenectady.

It was my good fortune on the first Wednesday after I joined the Lamson Company in mid-August to attend the annual summer outing of the M. I. T. Club of Central New York. I saw Charlie Nitschke, IV, who is with the Atmospheric Nitrogen Company there.

Jack Herlihy, of course, will guide the home activities of the Class, located as he is with the Edison Company in Boston. Whenever you get to the Hub give Jack a ring. Maybe you'll find he's having a class dinner while you are there. In closing I have one more reminder for all '11 men. Just change the address on those stamped envelopes you always keep on hand addressed to me, and then write to Dennie. — ORVILLE B. DENISON, *Secretary*, The Lamson Company, Inc., Syracuse, N. Y. JOHN A. HERLIHY, *Assistant Secretary*, 588 Riverside Avenue, Medford, Mass.

**'12** It is with deepest regret that we open the new season with the sad news of the passing of Lester W. Cooper, VI, on September 15. Cooper was operated on for appendicitis, and failed to rally, dying at the Mount Vernon Hospital, Mount Vernon, N. Y. He is survived by his wife. Les was one of the staunchest supporters of everything undertaken by the New York bunch. He could always be counted on as a regular at our meetings. We are going to miss him greatly.

In spite of our appeal in last July's issue, for letters and stories from classmates, about the only ones we get are those we go out for with the proverbial hammer and tongs. Even so, we're glad to get those. Some people are hard to satisfy. Take the case of Hugo H. Hanson, X, for instance. In last May's Review we gave him what we thought was a wonderful write-up. Indeed we lashed ourselves into a perfect frenzy of biographical effort. True, we may have put a few extra touches of our own to the bare facts, but he ought to feel flattered. Instead he's picking on us for a few miserable little errors. Here's his letter: "I have just received my copy of The Review. I read the 1912 section with particular interest, especially as it showed what was meant to be my life history. Do you mind if I make a few corrections? You have gotten mixed up somewhat in the number of future co-eds I have going to Technology. Instead of three, I have only one, but I also have two, without the 'co' whom I hope will be members of the classes of 1940 and 1943 respectively." Now if

Hugo were not such a darn good engineer, he might be a better letter writer. If he will refer to the carbon copy of his first letter to us, he will see that what he said was "I am proud to inform you that I have three husky children, all going to Technology, if they still permit co-eds when mine grow up." We leave it to any fair-minded jury, if your Secretarial Department might not be pardoned for assuming they were all future co-eds. However, our apologies are hereby offered to Hugo H. Hanson and his husky offspring, male and female.

At the risk of incurring another shower of bricks, old voltmeters, pliers, rejected Okonite (whatever that may be), and other junk, we'll try to give you a little spiel on another illustrious '12 man, whose name has been mentioned in these columns, incidentally, a number of times. Robert J. Wiseman, VI, who puts the goodnight in Okonite, has proved that a man can take all the post-graduate courses at the Institute, can accumulate a bundle of degrees, mess around in more or less abstract research work for several years, and then go out and catch the hurrying world by the heels, and climb right up on top where the going is good. Bob's story since graduation is, in brief, one year as assistant in the Electrical Engineering Department under Professor Laws and two years more as a graduate student resulting in the degree of Doctor of Engineering. (This degree was later changed to Doctor of Science.) Two years in the Department's Research Division, and then the first jump into the deeper water took him to the Western Union's engineering department. A year later he was with the National Conduit and Cable Company, Hastings, N. Y., as wire and cable engineer. After three years there, Bob went with the Okonite Company, Passaic, N. J., where his title of chief engineer only partially indicates the extent and scope of his responsible position. His own statement of it is characteristically brief, and modest, but here it is. "My work here has been very interesting and varied. I have been to Europe twice for the company, and I travel quite a bit in this country. I am writing this letter on the train to New York just returning from my third trip to the Pacific Coast. My work is of a sales nature as well as engineering, which keeps me from becoming too closely confined to one phase of the business." As we understand it, Bob has had his fingers in the writing of specifications and designing some of the biggest and most important power cables in the country. He meets and confers with the leading engineers of public utilities companies. After his own company secures a contract, he supervises the manufacture and testing of the product in his own plant, and often takes part in the installation and acceptance tests after the cable is delivered. Bob seems to be a confirmed bachelor, but we think there is still hope for him. On his travels he reports that he has seen Billy Lynch in San Francisco, and Doc Cook in Boston. Bob expects to be on an extended trip through the South

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and Southwest in November, and hopes to run across some of the 1912 crowd at that time.

C. A. Cary, I, after spending five years in the Engineering Division of the Electric Bond and Share Company at the New York office, joined the du Pont organization in June, 1918. After spending a year on explosive manufacture and munitions at their Brandywine plant at Wilmington, Del., he was made assistant superintendent of the Black Powder Works at Wayne, N. J. In 1921 he was moved to the Nemours Works in West Virginia in the same capacity. In September, 1923, he was made superintendent of the Connable Black Powder Works near Birmingham, Ala., remaining there until June, 1925. In 1925 Cary was transferred to the rayon manufacturing subsidiary and moved to Old Hickory, Tenn., where he remained for three years in operating work, being in charge of one of the two operating units for the last two years. As Cary says: "The manufacture of rayon is a very interesting field and continuous progress in process improvements and the rapid expansion of the business has kept us fully occupied with plenty of vigorous problems." In proof that Cary was able to meet these problems as they arose, he was transferred from Old Hickory to Buffalo and then to New York, his present commission including the co-ordination of production and sales and responsibility for the organization handling orders and production scheduling, as well as the collection and analysis of all information relative to general business progress of the rayon department.

Cary's office address is 2 Park Avenue, New York City, where he would be glad to meet any of his old friends. While reading the above you must wonder how Cary found time to devote much of his time to his family, but here is his record. He was married in 1913 to Miss Frances Campbell of Cherryville, Maine. They now have three children, George, born in June, 1914, Mary, born in December, 1916, and Campbell, born in May, 1925.

Gerald Keith, I, is still in New Haven, located at 186 St. Ronan Street. We have requested a complete autobiography, but either reticence or lack of opportunity has postponed this pleasure. — Clarence McDonough, I, is now located in Paris as chief engineer for The Foundation Company, his address being 134 Boulevard Haussmann. Clarence was first located in London, but as the construction work which he is specializing in is located in Greece, Italy, Spain, France, and Belgium, he found Paris a more central location. Clarence says: "This is a great town to come and visit but it is not so good for a steady diet." Your Secretary is all for a visit at least.

A photograph of Paul E. Jeffers, IV, appeared in the July issue of *Yachting* and in response to a request from your Secretary he has the following to say: "I have often thought about the bunch that I knew when I was in Technology, and I have always wanted to get back to the reunions, but to date I have not been able to do so as it is rather a long walk.

I have been in the practice of my profession as a structural engineer since I got out of school and in business for myself since 1919. You were correct in your assumption that I was the guilty party as far as the reference to yachting was concerned, as I was a member of the Race Committee for our mid-winter regatta. I have been playing around in the yachting game about all my life and have been commodores and so on. I am about ready to drop out of the active participation in the official end of the game and stick to paddling my own canoe and playing by myself. Remember me to any of the fellows whom you happen to see, and rest assured that just as soon as I am able I will be at the Reunion."

B. H. Morash, VI, announces the arrival of Donald William Morash, weight nine pounds, on August 19. Morash is located in London at 258 Gray's Inn Road with the Kelvinator, Ltd. His letterhead lists him as one of the three British directors. Morash is looking ahead to the education of the young man and says that as Eton and Harrow do not check up with his democratic tests, he is planning to come back to the United States as soon as possible. Morash should know his geography, as he terms himself an international hobo. After spending ten years with the General Electric Company in Japan and China, he returned to England in 1920. And after spending two months there he proceeded to India where he carried on an engineering and machinery business for the W. I. Grace Company interests. The climate did him in and in 1921 he had to leave, spending the winter in California, and the following summer in Nova Scotia recuperating. In 1922 he went with the Lipman Refrigerator Company of Beloit, Wis., as sales manager. In 1924 he again became connected with the Grace interest in New York, but in 1926 he went with the Electric Refrigeration Corporation, now the Kelvinator of Detroit, as assistant export manager. On September 15, on two weeks' notice, he sailed with his wife for England, after disposing of his home in Detroit. Relapsing for a moment into sales talk, Morash says: "If every member of the Class does not at present have the benefits of a Kelvinator Automatic Refrigerator in his home, he is missing one of the greatest benefits ever made available for the health and comfort of mankind." No wonder the English masses are begging for them. — FREDERICK J. SHEPARD, JR., Secretary, 125 Walnut Street, Watertown, Mass. D. J. McGRATH, Assistant Secretary, McGraw-Hill Company, 10th Avenue and 36th Street, New York, N. Y.

'13 No notes have been received by The Review Editors from the Secretaries of this Class for inclusion in the November issue. The Secretaries received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to G. P. CAPEN, Secretary, 50 Beaumont Street,

Canton, Mass., or to A. L. TOWNSEND, Assistant Secretary, Room 3-435, M. I. T., Cambridge, Mass.

'14 Were class secretaries philosophers, they would use this issue of The Review to foist their theories upon their fellow classmates. In May, spring is in the air: class secretaries' hearts are glad, for then they know that no more notes will be required for four months; that the glorious vacation is ahead; and certainly with a span of four months there will be a fund of material for the class notes. Then comes the fall; vacation is past; Review notes are due; but that fund of material is as thin as the mirage on a summer horizon. It is well that class secretaries just chronicle the facts as they pass, for there is but one Allan Winter Rowe among us who has the power to write as well as to chronicle.

But vacation time did renew old friendships. Down on the shores of Buzzards Bay, just at the end of Cape Cod Canal, is Dixon's Garage. It stands there as if to serve not only those who pass by land but also those who travel by sea. It is the center of attraction; a stream of cars file before the filling pumps; its fiery red wrecking truck darts back and forth; and now here, now there, supervising all, automotive engineer, refrigerator salesman, insurance agent, chicken raiser, and father of two husky youngsters is our own classmate, Donald R. Dixon.

Across the bay on the Marion shore is a putt, putt, bang! More putts, more bangs, but no action. Amid the oily blue smoke is a broad grin almost hidden behind a moustache. It is Dean Fales vacationing. Although he is Professor of Automotive Engineering at Technology, he takes for his summer diversion the overhauling of his motorboat engine.

Eight hundred miles in two days, and by land, too! It is just S. W. Stanyan, anxious to spend every possible minute of his holiday at his camp in Maine, and lamenting all the way that the Ohio Brass Company in Mansfield, Ohio, is so far from the Atlantic. — On September 8 the Munson Liner *American Legion* had on its passenger list Mr. and Mrs. Philip M. Currier and their son. Phil left for Buenos Aires, where he expects to spend several months in the interest of the General Electric Company. He will return by the way of Europe. — R. D. MacCart is still in the Navy in the aeronautical construction section. He is stationed at Buffalo. His work for the past several years has been in connection with the design and construction of advanced types of planes and engines.

We can never mention aeronautics without including a word regarding Porter Adams. He is the one member of the Class regarding whom news items are never lacking. Clippings from all over the country tell of his recent activities, the air races at Los Angeles, a conference at Yale, an important meeting at Washington, and so on through a long list of speeches, dedications, and so on. The prize reference, however, is far from



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his usual activities. It is a brilliant orange handbill, about sixteen by twenty-four inches. Here Porter appears as administrator assisting the auctioneer dispose of "what-nots," lace curtains, marble-top tables, and many other items listed on the handbill from a place "situated on Thetford (Vt.) Hill, quarter of a mile from the Thetford Post Office, on the road leading to Union Village." What next?

In the last issue of The Review, mention was made of the recent business advancement of our classmate, Paul H. Taylor. An earlier issue contained a tribute to Paul from the Crosscup-Pishon Post of the American Legion on his leaving Boston for his new activities in New York. How little was it then known that in this, the next issue, it would be our sad duty to tell his classmates of his death on July 24. A mastoid abscess developed as the result of water lodged in his ear from summer bathing. An operation followed, from which Paul never recovered. The funeral was held from the home of his parents at Wakefield, Mass. We have lost a classmate loved by all who knew him.

To H. A. Affel is extended the sincere sympathy of all his classmates on the loss of his wife. Mrs. Affel had been ill for several years, and we had all felt that progress was being made towards her recovery, but after a brave fight, she succumbed on May 13. — H. B. RICHMOND, *Secretary*, 100 Gray Street, Arlington, Mass. G. K. PERLEY, *Assistant Secretary*, 21 Vista Way, Port Washington, Long Island, N. Y.

**'15** This is the opening number of another season for our column. I hope you all have enjoyed a happy and pleasant summer. Due to my own absence from Boston I have not seen many of the fellows, and, sadder, I have heard from less, so I need your help. I know you will all begin to shower down some interesting letters. I am writing these notes in Cleveland where Gabe Hilton is attending the American Electric Railway Association Convention. I expect to see him if he can see me, but looking for him here is like trying to find a dry place in the ocean. Know what I mean?

The returns from the extensive mailing campaign are in, and among the twelve class groups from 1911-1922 in the Alumni Dormitory Fund Campaign we were third with \$2,941. At least it will furnish one room for us. And on behalf of the Class, I thank you all, both for your contributions and your spirit. We shall have a class dinner in Boston this fall, preparations for which will be made as soon as possible. I hope all available men will come. A notice for class dues has gone out. Just look up that stamped envelope that you put aside on your desk and stick a \$2.00 check in it and mail it.

From Lockport, N. Y., comes the announcement that Mr. and Mrs. James Benson Neal have a daughter, Margaret MacKay, born on July 4. Congratulations, Jimmie. This is probably our

youngest class baby. Let us know how she gets along.

On June 22 Alfred Hall wrote from 172 Church Street, Berlin, N. H., this good letter. Alf, as you know, is with Brown Company up there. "I am enclosing one of the many little yellow cards that I have received from you within the last few months, with the hope that it reaches you in time to number me within the host that have rallied to the support of good old Technology and 1915. Such a belated contribution demands the usual excuse for not having come across before, and in reply I will simply say that I am building a house here in Berlin this year. 'Nuf sed, I hope, but it also explains why I cannot make the pledge any larger than it is, and the stipulation that you will have to wait until some time within the next two years before collecting. I do not see many of the old gang up in this neck of woods, but once in a while I run across Don White who lives near me, and Douglas MacMurtrie less frequently because he is spending the greater part of his time up in La Tuque. I understand he had a great time in France last year, however. I, for one, am looking forward to 1930 with much anticipation, and I sincerely trust that I can arrange my vacation so that I can attend the Fifteenth Year Reunion of the Class." — On May 10, Kenneth D. Kahn wrote this letter. That's fine spirit and I hope his old friends will take heed and write him. "I received your letter on May 7, the day on which my reply was supposed to reach you. However, I assume that contributions will be welcome even if late. I will certainly call upon the ten men whose names you sent and will raise as much as I can. As you know, this hits us at a rather inopportune time. I have talked with several and they feel rather pinched just at this time as I do myself, because we are just getting settled, raising families, and so on (only one each, of course), and some are under about all the expense imaginable. For myself, I want to say that I certainly enjoy reading the class notes, and appreciate the good work you are doing right along in getting the news together. I haven't much of interest to tell, but as I am always glad to read even the most insignificant things about the men, maybe some others will be interested in news of me. I have been out here in Hollywood about seven years, during which time I have seen very few of the Fifteneers and not very many of the Alumni of any classes. I am in the contracting and building business, specializing in homes, small store and office buildings, apartments, and so on. I have two children, Kenneth Jr., six years old, and Adele Katherine, one year old. We live at 5871 Canyon Cove, Hollywood, and the office address is 6769 Lexington Avenue, Hollywood. I will be glad to see any of the men who happen along out here at either of the above addresses, which, by the way, are in the phone book. Perhaps if the men knew how much interested we are in the doings of our classmates, especially out here, four thousand miles from the center of school

activity, they would write in oftener. For instance, there's R. P. Joslyn, J. N. Dalton, L. E. Armstrong, E. A. Weaver, and so on. I'd like to know where they are and why. If every one would write in just a little note of what he is doing it would make good reading for all of us."

The Alumni Office sent me the following, received from H. W. Anderson, II: "I expect that a class note, my first since leaving the Institute in 1915, might be in order. I arrived in England on June 16, and have attended the Ascot races, and visited many textile mills and hosiery manufacturers. I am flying to Paris next Saturday to visit textile centers of France, Spain, Italy, Austria, Czechoslovakia, Germany; flying to Leningrad, Russia, through Finland and Scandinavian countries; then home to the United States. I have done this before but not all at once. My schedule since leaving the Institute has been rather filled up with action, but in getting around to the fifteenth year out I pen these few words of my activities in the hopes that any classmates getting in the vicinity of Philadelphia will look me up." There's a globe trotter for you. He sounds interesting in his brief description of his activities. I wish we knew more about him.

On the drive I talked with Private George Rooney, Joe Phelan, Bob Mitchell, Frank Scully, Mitch Kaufman, Jack Dalton, Mex Woy Thaler, but failed to reach many others I should like to have talked to or seen. Remember! Class dues, class notes, class dinner. — AZEL MACK, *Secretary*, 377 Marlboro Street, Boston, Mass.

**'16** No notes have been received by The Review Editors from the Secretaries of this Class for inclusion in the November issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to RUSSELL H. WHITE, *Secretary*, Kardex-Rand Sales Corp., 118 Federal Street, Boston, Mass., or to CHARLES W. LOOMIS, *Assistant Secretary*, 7338 Woodward Avenue, Detroit, Mich.

**'17** Official recognition has been given the Benedict plank in the 1917 party program. Leon L. McGrady, President, and Atwood P. Dunham, Treasurer, have said farewell to the pestiferous group of die-hards that still includes a few hard-boiled roughnecks headed by Lobdell and Lovejoy. Mac said goodbye on Wednesday, September 26, at New Canaan and left for parts unknown with the former Miss Lois Donovan. A representative group was on hand to wish them well. Brick Dunham married Miss Laura Edna Foye at Brockton, June 16. Mr. and Mrs. Mac will live at 5040 City Line Avenue, Philadelphia, and Mrs. Dunham and her husband at 11 Ellis Street, Brockton.

Sears, Roebuck and Company moved to Boston during the summer under the

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direction of E. Penn Brooks, general merchandising man. It would be worth the necessary \$6.00 to show here the photograph that adorned the Boston newspapers when the main Boston store was opened — if the Class had the \$6.00. Part of the eulogy on Mr. Brooks must suffice: "College training, wide experience in merchandise work, a Maine Yankee by birth and the business of warfare with the A. E. F., have formed the background of the comparatively short, but very active career of E. Penn Brooks, in charge of merchandising for all retail stores of Sears, Roebuck and Company.

"When Mr. Brooks was graduated in 1917 from the Massachusetts Institute of Technology, the advent of the World War cut short his ambition to enter industry as an engineer. He spent two years in France with the First Engineers, First Division. Mr. Brooks was cited for heroism, receiving the Distinguished Service Cross.

"Before coming to Sears, Roebuck and Company about a year ago, Mr. Brooks added wide experience in merchandising work to his college training by spending several years in the manufacturing field and the mail order business. He was born in 1895 at Westbrook, Maine. He is married and the father of two young daughters."

Penn has expressed disappointment in the amount contributed to the Dormitory Fund Drive by 1917. Our only consolation is the fact that 1917's contribution compared favorably with that of the other classes in the group with which we were associated.

H. E. Lobdell, Professor, and so on, took his annual vacation tour and once again joined Neal Tourtellotte out in Washington and Oregon. — William Ayres Gray, Jr., was decorated with the New Jersey Distinguished Service Medal by Governor Moore on May 5. The decoration was based on Bill's war service citation.

Dick Lyons has been moving up in the oil industry for a number of years and has been recognized by the *Oil and Gas Journal* as one of the prominent men in the industry. The regular article "Men Known in Oildom" was given over to Dick in the issue of May 31. The magazine claims the following for him. "Richard T. Lyons, head of the Skelly Oil Company's land and geological departments, is one of the younger petroleum executives who has always been engaged in the oil industry.

"He was born at East Weymouth, Mass., December 4, 1895, and attended the University of Maine and the Massachusetts Institute of Technology, graduating in 1917 with the degree of S.B. in mining engineering. From 1917 to 1919 he was a lieutenant of field artillery in the United States Army, and upon receiving his discharge from service, his oil career began. He entered the employ of the Sinclair-Gulf Oil Company as geologist in the North Central Texas fields, and went through the Ranger boom. He went to the Maracaibo Basin of Venezuela as

geologist for the Maracaibo Oil Exploration Company of New York and was in the tropics during 1920 and part of 1921. In 1921 he returned to the United States and re-entered the Sinclair employ as geologist in Oklahoma and Arkansas. In 1923 he became geologist for the Pure Oil Company at Mexia, Texas, specializing in the fault zone area of Texas. In 1924 he became chief geologist for the Peer Oil Company at Tulsa, and later in that year he entered the Skelly service as geologist in Oklahoma and West Texas. In April, 1927, he was placed in charge of the land and geological departments of West Texas, establishing a division headquarters at San Angelo, Texas. In October, 1927, he became manager of the land and geological departments of Oklahoma and Texas with headquarters at the Skelly Oil Company's main offices at Tulsa."

Bob Gannett is with the Norman-Hoffman Bearings Corporation of Stamford, Conn., and has been traveling all over the eastern map for them. — F. N. Crane is located at Room 505, New City Hall, Los Angeles, and would be glad to see any classmates that get out that way. He offers to help them enjoy their visit to the city. — Walt Beadle boasts of the birth of Spofford J. Beadle on May 12. Spofford's sister, Sally, is now three and a half years old.

E. D. Wells is with the Department of Mathematics and Mechanics, University of Minnesota, Minneapolis. — Wes Hawes is still with the National Process Company, New York City, specialists in short runs, black and white or colors, by photo-lithography. They make the well-known Giant advertisements. — Irving B. Crosby went to Northern Labrador early in June in connection with his consulting and geological work. — RAYMOND S. STEVENS, *Secretary*, 30 Charles River Road, Cambridge, Mass.

**'18** Once again the Secretary is back on the job with Class Notes. Here's hoping that the fellows will assist me this winter in keeping the 1918 section filled so that the 1917 and 1919 Notes will not come together.

Of course this time we have the Reunion to think of, so that is the first thing on the program. Those who were there may think of things which are left out in this tale, and if you do, please drop a line to 148 State Street. I will see to it that it comes out in the next issue after the word is received. Now for the story. On Friday afternoon, June 22, the members of the 1918 group started to arrive at Weekapaug Inn, Weekapaug, R. I., which is about six miles southeast of Westerly. First to arrive were Sax Fletcher and Ev Rowe. Sax was anxiously looking for someone to play golf with him in the rain which was falling at that time. Actually we didn't see the sun in the forty-eight hours we were there. Not far behind this couple came Don Goss and his wife. It was known that as soon as Ralph arrived golf would be on, so immediately off went the first foursome of the 1918 party. From this time

on they were coming in from all directions. One of the biggest surprises was when Mike Flett (Lawrence Hugo, to use the name given him by his family) and his wife arrived from far off Buffalo. This couple held the prize for coming the greatest distance. Before dinner on Friday night there were at least forty people there that belonged to our party. The chairman of our reunion committee, Shorty Carr by name, was detained on business so he was unable to arrive until the wee small hours of Saturday morning, but a few of the crowd were willing to wait up for him.

After dinner Friday night we adjourned to the ballroom of the Inn, better known by the management as the Sea Room, and there we found a three-piece orchestra which played for the enjoyment of those who cared to dance. Ed Rogal had brought his movie camera with him and he put some pictures of the Institute and some that had been taken of a 1918 gathering a few years back in Boston on a screen formed by some sheets spread over some curtains. If it was a makeshift it did the work. Off and on all through the Reunion Ed was taking pictures of the crowd so that in the later years we will have them as a remembrance of the Tenth Reunion. Following the dancing it was decided that we would have our fireworks, even if it wasn't very pleasant. (Shades of all the dark and dreary things you can think of, will the Secretary ever forget the visit to the Chief of Police at Westerly to get permission to light the fireworks after we had them there?) Mal Eales and Warren Dow took care of this end of the Reunion and said they would set them off so they would go out over the ocean and not in the direction of any of the cottages. Two skyrockets and one roman candle went off nicely, when — no one knows who did it — some sparks from something went into the whole box, and rockets and everything else went in all directions. Naturally some of them started for the cottages, and some actually hit them. One or two of the cottages were occupied and spot lights were put on us. I guess they thought a barrage had been set upon them. No one was hurt. They say the Secretary did a marathon down the beach. Ask some of those who were there. They can tell you. After the blaze was put out it was found that the salute of bombs purchased for the occasion were still intact, so we used those, and that helped a whole lot.

Back to the hotel we went and there we partook of a midnight supper carefully prepared for us by the management. No one was allowed to escape this meal. Even during this meal the gang was arriving, and we remember very particularly that Ernest Bridgewater and his wife were guided by the fireworks in getting there. We confess that it was rather a hard place to locate, but for those who came by daylight there were 1918 Reunion signs along the road from Westerly out.

Saturday morning dawned rather dreary, and this was the day scheduled for the baseball game. Johnnie Clarkson



went chasing around to locate a place to have it, and returned with permission from a farmer for the use of one of the neighboring fields. After all this it was generally thought best not to attempt it, so, instead, most of the group adjourned to the golf links again to get into practice for the tournament in the afternoon. During the morning a few of the most courageous took a dip in the ocean. We understand it was rather chilly, and no one stayed in very long.

In the afternoon while the gang were out on the golf course the wives had their own entertainment, a bridge party at the hotel. Mrs. Donald Goss won the first prize and Mrs. Thomas Kelly won the second. When the final returns came in from the golf tournament it was found that Walter Robertson led the list. He says it was because he knew his handicap better than the rest of them. Sax Fletcher came close behind Walter.

Saturday evening, of course, meant the banquet, if you could call it such. There were fifty-eight at the table that evening, and there had been eight others at the hotel for short times during the afternoon. Colored caps and noise makers were at the places when the gang sat down. What was the thought in Maggie Magoun's mind when he found the label on his noise maker? Shorty Carr acted as toastmaster for the occasion, and a mighty good one he made, too. Ed Rogal was taking movies all the time so everyone present will see himself in them when they are shown later in the year. After the dinner was over cheers were given for almost everyone. Shorty did his best to talk over the noise that some others were trying to make, and announced that he had had a communication from our President, Bob Van Kirk, handing us his resignation as President of the Class, with the suggestion that the form of government be changed to a Board of Governors made up of fellows from Boston and New York to handle things for the next five years. The group was then mentioned by a committee on nominations and duly elected. The following are in office for the next five years: Shorty Carr, Johnnie Clarkson, and Maggie Magoun for the Boston group; and Mal Eales, Sax Fletcher and Bill Foster for the New York group. As someone has said recently this committee will have to get busy now to make plans for the Fifteenth Reunion if they want to have it surpass the Tenth. That is up to the committee. Next on the program was Maggie Magoun speaking on the subject of his "baby," *The Eighteenth Amendment*, which will be out by the time these notes appear in *The Review*. (Any who have not subscribed for the book should do so. It is going to be some book.) After more cheering we again adjourned to the ballroom where the orchestra was awaiting us and more dancing was in order. During the evening one member of the gang appeared in the costume of a clown and entertained us with his queer sayings and antics. During the midnight lunch Earl Collins performed at the piano.

Sunday morning dawned gray and miserable just as the other days had done. Many had planned on remaining over lunch that day, but on account of the weather decided that an early start would be best. This meant that the numbers dwindled from early Sunday morning on. There were about fifteen around for the noon meal and after that came the grand exodus. Although the weather hadn't been the best they had all had one grand and glorious good time. Those who came without their wives vowed never to attend another without them. The owner and management of the Inn were so delighted with the party that they invited us to return there at the time of the Fifteenth Reunion. May the committee keep this in mind.

The sixty-eight people present at the Reunion for all or part time were: Cliff Bellis, Ernest Bridgewater and his wife, Shorty Carr and his wife, Johnnie Clarkson, Eaton Clogher, Earl Collins, Lovey Collins and his wife (who, by the way, were the bride and groom of the party), Harry Coyne, Charlie Dow and his wife, Mal Eales and his wife, Stan Franklin, Sam Fuller and his wife, Don Goss and his wife, Ben Greely and his wife, Lawrence Hall and a friend, Pete Harrall, Asher Joslin and his wife and dog, Sid Judson, Tom Kelly and his wife, Jack Kennard and his wife, Nat Krass, Jim (Ned) Longley, Maggie Magoun, Ralph Mahoney, Al Murray, Paul McGreenery and his wife, Bill Neuberger and his mother, Gretchen Palmer, Fred Philbrick and his wife, Henry Richards and his wife, Walter Robertson and his wife, Ed Rogal and his wife, Ev Rowe, Bill Ryan, Pete Sanger, Al Sawyer and his wife, Max Seltzer, Carlton Tucker and wife, Chink Watt and his wife, and Ralph Whitcomb and his wife.

Now for news. The first piece is that our former President, Bob Van Kirk, was in an automobile accident on June 1, and at the time of the Reunion was still confined to the hospital with a broken knee cap. Mrs. Van Kirk was also injured, and was still at the hospital when Bob wrote us at reunion time. A telegram was sent them from the Class at the Reunion. We hope that they are both well and active again.

Next comes the news of two weddings in the Class. Sanford Lyons, we hear, was married in June but none of the particulars are before us. — In the Boston *Transcript* of June 13 was the following from Miami Beach, Fla.: "At noon today at the Community Church here, Miss Helen Recardo Arnold, daughter of Mr. and Mrs. William E. Arnold of 330 Northeast 27th Street, who were for many years residents of Wakefield, Mass., became the bride of Frank Parker Stanton, son of Mr. and Mrs. William J. Stanton of Miami." — Mr. and Mrs. Joseph Kelly are receiving congratulations on the birth of a daughter, Mary Elizabeth, on July 10. This explains why Joe was not with us at Reunion.

Wendell Kayser, who has been business manager at Wellesley College for the last five years, has given up that position and

returned to his native heath of California to go into the stocks and bonds business. He has become manager of the Southern California office of Gorman, Kayser and Company, 650 South Spring Street, Los Angeles. The Kayser of the firm is Wendell's brother. Wendell and his family, consisting of his wife, son David and daughter Elaine, plus one dog, started from Massachusetts the first of August to drive across the continent. They were planning on taking about three weeks to make the trip but no news has been received here as yet. Takes some time to see all your old friends and get settled. Good luck to you in your new venture, Wendell.

Reunion returns brought in many new addresses and changes of location. There are one or two changes I will tell you about now. Henry Stevens has gone from West Virginia to California. Whether the oil fields have drawn him there we do not know. George Sackett is still with the rubber people in Akron, but apparently he doesn't like living in the same house with Bill Turner as he has now moved to 214 North Portage Path. Clarence Bassett has come back to Taunton to live after being out in Scranton for some time. Horace Swan has left the Symington Company in Rochester, N. Y., and is now with the Gould Coupler Company at Depew, N. Y.

Many were the messages received on the return postcards at reunion time saying that they were sorry that they couldn't make it but they hoped everyone would have a good time and sent their best wishes to everybody. The list would be a long one if I tried to have it printed. Those at the Five Year Reunion can imagine the type of message that was received from Perry Hewitt. — Richard Rimbach is now Vice-President and Treasurer of the Instruments Publishing Company, 1117 Wolfendale Street, Pittsburgh, Penna.

The Dormitory Drive is over, and I know every member of the Class is glad of it. The Class of '18 was at the foot of the list of the twelve classes working together, but when you realize that it was our reunion year, that wasn't so bad. We just cleared the \$1,000 mark, and when you consider that no clearly planned drive was worked on this Class, outside of the paper drive that was used for the twelve classes as a whole, I do not think that is so upsetting.

Ken Reid must be coming right along in his work now. To quote a paragraph from a letter received from him recently, "I suppose you will think I am exaggerating when I say that I have no spare time. I find, however, that I am busier than I have ever been before in my life, what with a regular publication to get out every month and a book on top of that. At home I have a number of duties as you may imagine, since a six months old son complicates the household routine." This letter was written in May so the son must be nearing his first year mark now.

We hear from an underground source that Bill Wills is designing and building

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a new home for Jack Sharkey. What about it, Bill? — This will be all for this time, but keep sending in your news so that we can keep up our record of having something in every issue. — GRETCHEN A. PALMER, *Secretary*, 148 State Street, Boston, Mass.

**'19** No notes have been received by The Review Editors from the Secretary of this Class for inclusion in the November issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to PAUL F. SWASEY, *Secretary*, at 53 Hollis Street, East Milton, Mass.

**'20** The eagle-eyed clipping bureau which your Secretary maintains at frightful expense to serve the Class of '20 sends me the following startling news clipped from a Newton paper under the direful heading, *Police News*: "A number of speeders were fined in Newton court yesterday morning." Included in the group was Scott Wells, 24 Pinecrest Road, Newton Centre, \$10.00. Can we believe our eyes?

Your Secretary is happy to report a better than average number of gladsome tidings to start the new Review year. First off, we can hardly wait to announce in these columns the glorious news that the hitherto arch-defier of all the '20 benedicts has at last come to time — and how." Myron H. Clark, otherwise known as Buck, has plighted his troth to the charming and talented Miss Mary Orr of Hartford, a graduate of the New England Conservatory of Music. In referring to the happy event, Buck's home town newspaper refers to him as the greatest center Concord High ever had. It brings a mist to our old eyes to realize that fame such as his lives on despite the passing of the years. The Class of '20 rises to a man to congratulate and cheer you on, Buck, old man. And while we are still on our feet let us give another lusty cheer for Larry Winant, who will be wedded to Miss Helen Pingry of Millbrook, N. Y., before these notes see the light. This is mighty good news, Larry. And still another notable wedding has just been celebrated. Howard Williams officiated as groom on September 15 at Watertown, the bride being Miss Margaret A. Hargedon. Mr. and Mrs. Williams will reside at 22 Gilbert Road, Belmont. Sincere congratulations from all of your classmates, Howard. Yet another, news of which did not reach us in time for the Review of last July, was that of Kennedy Pope to Miss Ruth Hodgdon of Dedham in June.

Equalling this brave showing is our birth record, also much belated due to our long summer recess. Herb Federhen, 4th, must be quite a little man by now as his arrival was announced last April 14. And, likewise, young David Pearson Eter of Los Angeles must be getting his sea legs as his birth dates way back to March 18. Frederic Brogton Gee made

Dick's Fourth of July more than ordinarily glorious for he picked that famed day to add to the illustrious name of Gee. Finally, Joseph Jean Baptiste Dumas completed this quartet of fine boys making the Count a proud father on July 14. Truly, 1920 has much to congratulate itself upon these past few months.

We have welcome news of Henry Erickson who after wandering from mine to mine in South America and Mexico joined the Hardinge Company as division engineer of sales of mining machinery, and traveled out of Salt Lake City for some months until a year ago he found a partnership in consulting engineering at Houston. — Jack Nolen is with the Regional Planning Federation of Philadelphia. We'd like to hear from him directly. — L. G. L. Thomas is now Vice-President of the Economy Pumping Machinery Company of Chicago. — Harold Kepner is teaching at Rensselaer Polytechnic Institute. He is married and has a baby daughter, Janet. His address is 2179 Fourteenth Street, Troy.

A. D. Higgins is now controller of the L. L. Berger Company of Buffalo, a leading department store. He has a model family consisting of one wife, two sons aged seven and one respectively, and one daughter aged five. — A nice letter from Bob Tirrell follows: "Supposedly working in Boston, being sent out on a job for two or three months, then waking up to the fact that I'll be away from home so long that it warrants closing up my home and putting furniture in storage leaves me only the address of my employers, Stone and Webster, Inc., as the nearest approach to a permanent address I can give. The above address is only temporary while here or until either Stone and Webster or myself change our mind and move on.

"I can't say that I have much to offer the Twenty-ites in the way of news. My family continues to number one wife and one son, who is daily trying to learn the mysteries of toy engineering. My work continues to be along the lines of design of various types of plants for power stations, hydroelectric stations, gas plants, and at present helping in a very small way in a chemical plant. The monotony of daily toil is broken up by an occasional trip to the field for construction purposes, as for appraisal, or to the client for his own purposes. I must admit that I do not see very many 1920 men about the streets. For some reason or other I run into later or earlier classes more than I do our own."

Sam Burr called on me not long ago and I was unfortunate enough to be out of town. Sam is sales engineer for the Copperweld Steel Company of New York, as yet unmarried. — A good letter from Ken Clark reads as follows: "I have recently launched on a new and very interesting business. Two other fellows and myself recently organized and built an architects' exhibit at 11 Beacon Street, Boston. This exhibit went over so well that we decided to start a chain of these exhibits throughout the country, and our first step in this direction was the

establishment of an Architects Exhibit here in Cleveland, and I am here at the present time to build and operate such an exhibit in this city. The proposition is going ahead splendidly here in Cleveland and we already have a large number of the leading manufacturers of building materials in the country installing very elaborate displays in our exhibit rooms. I ran into Shumaker the other day here in Cleveland and find that he is just starting in business here."

That grand old adventurer, Bunt Murphy, writes again, from far off Syria, a most interesting and welcome letter. He says in part: "I fear that I have not been very good in keeping in touch with old school friends; in fact, except for Dick Coombs and Betty Taintor, I know very little of the whereabouts of any of the Class. Occasionally I hear from Herbie Smith and from George Buttler, who is now in Mexico. Once again I am back in the Near East. Early in 1925 I went to America to stay, to establish myself, to get married, and to get a home. I did none of these things. Instead, after being there for a little over a year I packed my bags and returned to the East. There is a real lure to this part of the world. The fact that people have time to think and are not always rushing madly to do something or to get somewhere appeals to me.

"My job is an interesting one combining administrative work with individual social service case work. There is also the opportunity out here of being a big frog in a little puddle. That tickles my pride and my ego. After work and during vacations there is always an opportunity of going to some interesting place. Interesting people are always passing through and one has the opportunity of meeting them in a way much closer than is possible in America. I have a home out here and it would take the eye of any architect — just think of living in a pink house on the edge of the Mediterranean with palm trees growing in the garden. Come out and visit me." Bunt would be mighty tickled to hear from some of the old gang. Write him as follows: Henry R. Murphy, Near East League, P. O. Box 245, Beirut, Liban.

George Walmsley is assistant electrical engineer for the Edward G. Budd Manufacturing Company of Philadelphia. He has two fine sons, John and George, junior engineers he calls them. His address is 1337 Princeton Avenue, Philadelphia.

A welcome letter from Ray Ridgway at Niagara Falls says, "I was very pleased to hear that Count Dumas is still in the land of the living and I shall write to congratulate him soon. For myself, I long ago gave up trying to keep The Review informed of my children. The last score recorded a total of two, I believe. I now have four children, Stuart, Charlotte, Margaret and Herbert. I suspect that may be the class record. I have indulged in many kinds of public activities. I have been President and Treasurer of the local Technology Club which boasts of a large active member-



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ship. I have just retired as President and Director of the 'Players of Niagara.'

"At present I attempt to earn a living as an electro-metallurgist for the Norton Company. There is only one other member of our Class here, Bob MacMullin, who is a chemical engineer with the Mathieson Alkali Company. Mac has made himself famous as a chemical Goldberg. He has invented an automatic analytical machine and various sundry devices. He has just been elected to the chairmanship of the Niagara Falls section of the American Chemical Society. He promises to repeal both the first and second laws of thermodynamics at the first fall meeting when we are to have a demonstration of perpetual motion. I would be very much interested in a compiled list of our Class showing the present addresses and occupations of all members. At a reunion of the managing board of the *Voo Doo* last April it appeared that I was the only one present who was still posing as an engineer. Bond salesmen, advertising men, and other less distinguished professions were present in great numbers but no engineers. Similar count of our Class would be interesting." We agree with Ray that an analysis of occupations would be interesting. Who knows, perhaps we would uncover a few more actual engineers!

Nell Carpenter writes from Racine, Wis., as follows: "It seems a long time since I had lunch with you and Perk last December, and a few changes have taken place in the interim. When I got back to Boston I decided that I had had enough traveling and was going to settle down in New England where all good people live, and so with that thought in mind I settled right down here in Racine. However, it is not so bad and I am gradually getting acquainted. I am with the Wisconsin Electric Company, manufacturers of small high-grade universal motors, in the capacity of an assistant superintendent with the chances of dropping off the assistant as soon as I can make the grade." Glad to hear from you, Nell, and wish you a lot of luck.

Fritz Boley comes to light in Buenos Aires, address Alsina F. Y. 3 (sounds like a submarine). He says he is absolutely unmarried and sends best regards to all of 1920.—I had a very pleasant visit with Freddie Britton a while ago. Fred is still in Winchendon in advertising work. I also see Mac Maconi every now and then. He is with B. F. White and Company of Boston, investment experts, another engineer off the track.

I am reserving the close of this report for Ken Akers's able account of our little get-together at Pine Orchard last June which I had the bad luck to miss. Ken says: "To the best of my knowledge everybody had a good time at the Pine Orchard Reunion, with the possible exception of Jasper Green. . . . Joe Hennessy still remains the prize golfer, with Buzz Burroughs and Ted Hobson close seconds. I don't know for certain who was the prize duffer, but I think Akers claims that distinction. From memory, the following were at the Re-

union: Norrie Abbott, Johnny Nash, Ted Hobson, Scotty Wells, Dick Gee, Bob Patterson, L. D. Wilson, Joe Hennessy, Ev Freeman, Jasper Green, Jack Coyle, Buzz Burroughs, Karl Bean, Larry Burnham, Buck Clark, Pete Ryer, and Ken Akers. I may have missed some, as I wrote no names down at the time.

"You know, I guess, that I am with Fay, Spofford and Thorndike, Consulting Engineers. I left the Insurance Exchange on January 15. L. D. Wilson is now in business for himself with an artist partner in the interior decorating business." Let us know if you have any extra "interior decoration." L. D. — HAROLD BUGBEE, *Secretary*, 9 Chandler Road, West Medford, Mass.

'21 Evidently having the Philadelphia policemen in mind, Gilbert and Sullivan did not say, "A class secretary's lot is not a happy one." They missed the pathos of a secretarial Prometheus bound fast to a fixed copy schedule with a comic background (it's tragedy to us) of elusive class notes thumbing their noses at him. And so we start another season. What little news we have is here. The large amount you '21ers keep zealously guarded as your individual property is not here — and not because we do not choose to run it. Whatever your political preferences — whether Herbie to emancipate the lowly engineer or Al to restore the Lenox Grill to its former glory — register the straight 1921 ticket and vote often for bigger and better news for these columns. — Big doin's in California. Yep, Boss Jack Kendall, XV, again. Besides, there is Jackson Warner Kendall, Jr., M.H. (Master of Household) as of June 20. Box 599, Pasadena, will be too small to hold all the good wishes to the two Jacks and Queen Marjorie which will arrive with this Review. — Mr. and Mrs. Pierre Jay of Black Point, Conn., have announced the marriage of their daughter, Nancy, to Alexander Duer Harvey, III, on September 8. Mr. and Mrs. Harvey will be at home after November 1 at New Canaan, Conn. Congratulations from the whole gang, Dan.

Under the heading of "Medicine," *Time* for June 18 says, "Forcing fevers by injections of typhoid fever vaccine has been clearing up disturbances of the circulation for Doctors Arthur W. Allen and R. H. Smithwick, III, of Boston. The general rise in temperature which follows the injection warms up abnormally cold extremities, has in many cases checked or averted gangrene and has healed ulcers of long standing." Reg is a great hand for avoiding the limelight but we'll get the whole story on him yet even if he does refuse to answer our letters.

We have just heard that, at the invitation of President Stratton, D. P. Barnard, X, of the Standard Oil Company of Indiana, lectured to students in Aeronautical Engineering last term on "Automotive Fuels and Lubrication." Ray St. Laurent might throw some more light on this but the last you Asec heard of

him he was driving around the eastern part of the country and was planning to stop in Camden; apparently he failed to locate this garden spot. Ray had previously reported that S. M. Silverstein, X, and his wife had dropped in to see the St. Laurents in Whiting last spring while traveling for the engineering firm of Bigelow, Kent and Willard of Boston. Saul passed along a lot of news about Course X men. Joseph Lurie is also associated with Bigelow, Kent and Willard and has charge of the laboratory. A. A. Orlinger is located in New York City and is doing sales work for the Grasselli Chemical Company. L. C. Pelkus is still with the Barnstead Still and Sterilizer Company in Boston, and M. B. Hart is doing subway construction work in New York City.

Well, what's your news? Pick a name and address below and send it along now. — R. A. ST. LAURENT, *Secretary*, 225 Cleveland Avenue, Whiting, Ind. CAROLE A. CLARKE, *Assistant Secretary*, Victor Talking Machine Company, Camden, N. J.

'22 No notes have been received by The Review Editors from the Secretary of this Class for inclusion in the November issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to ERIC F. HODGINS, *Secretary*, 8 Arlington Street, Boston, Mass.

'23 No notes have been received by The Review Editors from the Secretaries of this Class for inclusion in the November issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to ROBERT E. HENDRIE, *Secretary*, 12 Newton Street, Cambridge, Mass., or to H. L. BOND, *Assistant Secretary*, 37 Concord Avenue, Cambridge, Mass.

'24 Reunion! That is the magic word for this year. Our first Reunion will be held very close to the end of the school year at some location near Boston and the Institute. Bill Robinson has appointed Bill Correale as chairman of the committee in charge of the arrangements, and he plans to spend all his time on the Reunion except that required by Parsons, Klapp, Brinkerhoff and Douglas, Engineers, of New York City and by a not very old baby boy. I can't at this time give you very much information of an authentic nature, for although I spent an evening with both of them late in September, we talked mostly of what we should do and had to do, but did not determine any material facts. In the next issue of The Review we promise to give you more information. More than that, we threaten to give you a progressive story all through the year.

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Ross C. Davey, who has been a student engineer with the General Electric Company since October, 1925, has been transferred to the radio department of that company and is now located in New York City. R. S. Julsrud who was employed as service engineer with the Combustion Engineering Corporation in Atlanta, Ga., is now associated in the engineering department with the Fuel Efficiency Engineering Corporation located in the American Trust Building, Birmingham, Ala. And to complete the news I have a wedding notice which appeared in the *Boston Evening Transcript*. From it I find that E. Winthrop Hall was married to Miss Thalia Peregrine James of Scituate on August 25. The ceremony was performed in Cohasset.

I urge upon you your duty to write to your Course Secretary or to me. Tell us as much about yourself and anybody else in the Class as you can. Please keep in touch, and if you can't think of anything else tell us whether you think Hoover, Smith, or Rogers is going to carry the election. — H. G. DONOVAN, *General Secretary*, 139 Girard Avenue, Hartford, Conn.

#### COURSE X

Our long absence from these columns has caused such a change in the circulation of *The Review* that Hal Donovan has been begging us for months to again take up the pen in praise of the chemical engineers. The last admission we made included something about our own wedding. This fact the members of our Course should consider when blaming our laziness for the lack of news. For months after my own, other weddings seemed of very minor importance. Other marriages and engagements have occurred in the following order.

Mr. James Archer Callahan announces the marriage of his granddaughter, Anna Kathlyn Allison, to John Albert Carnegie, Jr., on Saturday, January 21, at Bristol, Va.; Mrs. Jenny Bergetrand Anderson the marriage of her daughter, Anna Marie, to Ernest Lennart Kallander on Saturday, April 28, in Boston.

Mark Lewis Sinnicks and Miss Ethyl-mae Perrine were engaged about May 20. Mr. and Mrs. Frank Cole announce the marriage of their daughter, Agnese Marie, to Charles Edwin Herrstrom on Saturday, June 16, in the city of Washington; Mrs. Patrick Phillip McMahon the marriage of her daughter, Margaret, to John Teubner McCoy on Saturday, June 30, in New York City. All four on Saturdays shows that the half holiday on Saturday does some good after all.

We are without Sam Cotter's address. Our letter to him in Montana has been returned. — Clif Bailey has been a supervisor of the indigo plant for the du Pont boys since last fall. We had some wonderful food at his house in Wilmington one week-end this summer. — The writer has a new job in the Research Department of Congoleum. I am still working on floors. Please note the new address and write immediately. — W. B. COLEMAN, *Secretary*, 52 Liberty Street, Kearny, N. J.

#### COURSE XIV

Just when I needed it Bill Sturdy wrote me from New York City. I feel I must apologize to Bill for not looking him up when I was there only two days before he wrote the letter and within two blocks of his office. Previously I have mentioned that I was in New York one evening in connection with the Reunion. The next day I spent in the New York office of the Travelers Insurance Company on company business. That office is only two short ones from Bill's but in defence I must state that I was quite busy that day. Next time I will make a more earnest effort to see Bill and some of the other members of this Course (or Class, if there are any other courses with representation there).

Bill, although employed by the American Tel. and Tel. Company at 195 Broadway, has been spending most of his time in Philadelphia in connection with a study of the probable interference between the electrified lines of the Pennsylvania Railroad and the telephone lines of his company. And when they make tests of this nature, they submit some reports. On the work they did last fall they are submitting a report in ten volumes with a total weight of nearly eighty pounds. Which, as Bill puts it, would "make all the E. E. lab reports annually collected at Technology look like a package of confetti." I have reported in a previous issue that Bill was married last February. He is now living in Dobbs Ferry, about an hour from his office, but since he spends so much time out of town, that fact doesn't seem to make much difference. Occasionally he sees and has lunch with Dick Starke, but outside of him, he doesn't run across members of the Class very often.

Your Secretary in signing two of the three departments in this month's notes should in fairness narrate what little there is to be known about himself. He is still working hard for the Travelers Insurance Company in the casualty underwriting department, which department underwrites compensation, public liability, except auto, and miscellaneous property damage liability insurance. His duties are not of an underwriting nature but are entirely of personnel supervision. He is neither married nor engaged for the two much quoted reasons. I may have mentioned that my mother is now keeping house here for some other college graduates who work in the Travelers. Our representation includes Harvard, Dartmouth, Amherst, and Technology. And lastly, your Secretary is going to the Reunion next June. — H. G. DONOVAN, *Secretary*, 139 Girard Avenue, Hartford, Conn.

#### COURSE XV

Greetings after a busy and enjoyable summer! We hope that the experience has been mutual. With our Reunion rapidly approaching it behooves all of us to keep in fairly close contact with each other and with our Secretary. Let's hear from some of you fellows before you are all too aged and feeble to write. Most of our

news is indirect and therefore subject to corrections and additions. Please do not be hesitant about making these, and if we can see you personally, so much the better. We follow with that little we have heard from what we understand are reliable sources.

Carl Bartow is back with the Underwriters' Laboratories in Boston. — Monk Benning is still with the White Motor Company, but has moved from Cleveland to St. Joseph, Mo. — Ray Bowles is with the Armstrong Cork Company at Lancaster, Penna. — Web Brockleman is in Kelso, Wash. We would appreciate word from him. — Dick Bundy was a recent visitor at the Institute. He is in Schenectady with the White Motor Company. — We did not see Nish Cornish when he was here this summer, and we are sorry. Nish was at that time on his way to the Argentine with his family. He may be addressed there in care of Cia La Camoma, Buenos Aires, Argentina. If that isn't correct, Nish, let us know. — Another one of us who is in South America is Pret Littlefield, with the Anglo-Chilean Nitrate Corporation, at the address Coya Norte, Pocopilla, Chile. Ed Dunlaevy was also in the same section but has now, we understand, returned to New York. — Bill Donnelly is now with the Curtis Publishing Company, Philadelphia, in the magazine press division. — Gemmer is now regional sales manager for the Marmon Company at Atlanta, Ga. — Don Jennings is reported with Bemis Brothers in Indianapolis. — Bill Kirkpatrick may be found at the Graybar Building in New York where he is now with the Rickard Advertising Company. — We hope it isn't too late to congratulate Harry Kurzman on his marriage to Miss Eleanor S. Hess on April 24 of this year.

Al Liff is at Bloomingdale's, New York City. — Ludwig is to be married soon, we hear. — A paper handshake is all we can give Frank Shaw, who was married on August 4, but we will hope that the paper one will soon be a real one, and that he will give us the happy details. — Whitney Rhodes is at 195 Broadway, New York, with the Western Electric Company. — McCutcheon is located in the industrial department of the National City Company in New York City. — We haven't seen George Parker, but we understand he is with the United States Rubber Company here. — Bill Rosenwald has moved to Philadelphia. — Bill Rowe may be reached at Beach Bluff, Mass. He is in the real estate business. — Jack Spaulding is in Chicago. — Mel Wagner is raising trees at the Auburndale Nurseries, Auburndale, Newton, Mass. — Zartarian is at the Registry of Motor Vehicles, Commonwealth Pier, Boston. — J. O. HOLDEN, *Secretary*, 110 Monroe Road, Quincy, Mass.

'25 Wedding announcements have totalled about twenty-five per cent of my mail for some time, so I may as well start these columns with a list of those married or engaged. Irving MacLaren Symonds and Miss Virginia



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Walker announced their marriage on Sunday, August 5, at Rogers, Ark. They will be at home after September 1 at Miami, Ariz. Symonds visited his home in Brockton during August and was also around the Institute. — Mrs. Colin Joseph Trinnel announced the marriage of her daughter, Flora Elizabeth, to Edwin Lincoln Wildner on Monday, August 20, at St. Paul's Church, Holyoke, Mass. — Walter G. Scharmann and Miss Louise Ogden Randall were married on June 2 at the home of Miss Randall's mother in Belmont. The bride is a graduate of the Chandler Secretarial School. Mr. and Mrs. Scharmann are living at 304 Morris Street, Dover, N. J., where Walker is working as a chemical research engineer at the Pickatinny Arsenal. — William F. Herbert and Miss Elizabeth O'Neill were married on the twenty-ninth of August in Franklin, La. We haven't heard from Herb for some time, but presume he is still working in a sugar mill. — Miss Mary Morrison is engaged to John E. Kennedy, Harvard '23. She was presented at the Court of St. James in the spring of 1924 by her aunt, Mrs. Gore-Loyd of Hampton Court, England. — George W. Stetson is engaged to Miss Bertha M. Boyd of Eau Claire, Wis.

L. F. Symonds, 185 Church Street, New Haven, Conn., is local manager for the Construction Survey Company, a division of the Universal Engineering Company, organized to serve architects, builders, and the public with proficient construction. — Gilbert Noble who has been with the Marland Oil Company ever since his graduation, doing research work at the Coffeyville plant, is no longer with that company on account of the contraction in the oil industry which caused his company to close in a lot of their oil wells and reduce the research activities. He reports that he has had a wonderful experience in oil production and especially in the process of putting an oil field into a state of operation. At last accounts he was at home at 6917 Princeton Avenue, St. Louis, Mo., and was available for employment by any company desiring a good technical oil man. — I may add to Roger Ward's notes that he married Dorothy Oatis of Garden City, Long Island. Concerning the gentle art of piling the water up in a frying pan, why not use an Electrolux, the gas refrigerator? If you are not acquainted with the excellent qualities of this machine, see the advertisement in the *New Yorker* of September 22 or else come around to see us in our new apartment, where we intend to run a series of tests on the ice making capacity of the refrigerator.

Cowan, Parkinson, Preston, Wheeler and Company announce their opening of a new apartment at 102 East 22d Street, New York, on September 29. We could write further on the conveniences and beauties of our newest abode, but prefer to have our friends drop in to see it. — George Witham was down here for two weeks getting acquainted with the New York office of his company, the Improved Risk Mutuals. As a token of his apprecia-

tion of our entertaining him he presented us with a table lighter. From its present condition it should still be working the next time George comes to see us: it does take an engineer to run these contraptions! — Robie was another visitor and as our supply of beds had given out he had to accept a mattress and a half a dozen blankets. In spite of this, he appeared to sleep very well. — Bob Nisbett stopped in here on his way to Atlantic City and Washington. He is with the General Electric Company at Schenectady. While discussing power plants with him, we had to get out our old steam charts to settle an argument. Marks and Davis is one book that is worth what the Coop charged for it!

Don Wheeler went to Canada for his vacation, managing to get back inside of a week. At present I am still helping him to get rid of the Canadian money he brought back. He says it lasts longer here than the other kind did in Canada. The Scutan Company is getting so much business now that Don has had to run the machinery on three shifts. Lately he has been working on the midnight to eight in the morning shift, which gave us a chance to work his bed in two shifts. — Roger Parkinson toured all of New England except Maine on his vacation, and unless his watch was wrong made the record non-stop run from Lisbon, N. H., to New Rochelle, N. Y. This included the time taken in skidding onto the sidewalk while coming down hill into Brattleboro, Vt. — On my own two weeks I covered about all of New England that Roger missed. My 1915 flivver, Effie, performed nobly, only failing me once, and that time it was an easy job to plug the hole in the water jacket with a cork. This reminds me of the workman who borrowed a piece of string from a Technology professor to fix the Harvard Bridge. — Don Yakeley has moved to New York, to work for a consulting engineer. If Jim Holland should ever come to town the three of us could have a reunion over a piece of cherry pie. — FRANK W. PRESTON, *General Secretary*, 102 East 22d Street, New York, N. Y.

#### COURSE I

It is several months since we have appeared in print, but, as was duly recorded by Brother Preston, just about the time the notes were due for the final issue of last year, Ye Secretary was busily engaged in a wedding trip which extended from Boston to New York, Washington, Philadelphia, Syracuse, and points up. Speaking of weddings, we have one more member of the Class to chalk up in the married column. Ken Robie is the last one of whom I have record, and he was married on July 17 to Miss Rachal Lorraine Batson of Brookline. They have made their home at 53 Greenleaf Street, Quincy, Mass. In behalf of the Class, "Congratulations, Ken."

I ran into F. P. Hammond at the New York State Fair here in Syracuse a few weeks ago. It seems that he has been living in Syracuse since the first of the year (just the same length of time that I

have been here), and I have never happened to run across him or known that he was here. He is still with the Goodyear Tire and Rubber Company on road tests. This section isn't supposed to be an agony column or anything like that, but just to remind some of you fellows that you might write to me, I'll publish Hammond's lament requesting that Putnam write to him. He told me to bawl out Put if I saw him, but this is the nearest that I can come to it in print.

Ed McLaughlin has left the Boston and Maine and is now with the New England Power Construction Company. — Goldberg has also left the same railroad to work for the Board of Transportation in New York. No details in either case. — Hank Colby left Stone and Webster last spring to work for some company in Springfield, and is living at 30 Albermarle Street in that city. — Don Howe has forsaken the West to come east again and is now located with the Portland Cement Association in Boston. — Ted Kuss is another one who is missing from Stone and Webster ranks. His present address is Modjeske and Chase, 1245 21st Street, Detroit, Mich. — Tom Lowe, after roaming around the country for a while, is back at the University of Florida in Gainesville, while Robinson has forsaken the southeast corner state and gives his present address as Menemsha, Martha's Vineyard, Mass. — Wamsley and Weiler are still on the move. Don's latest is Hermann, Mo., while Chuck entertains at 113 West 11th Street, New York. — HAROLD V. ROBICHAU, *Secretary*, Atmospheric Nitrogen Corp., Syracuse, N. Y.

#### COURSE II

Let's see, what was that alibi I thought of the other day? Oh yes, the sob story I tacked on the end of the last blurb imploring you to send in your summer stories was left out of the July issue of *The Review* so how can they expect me to have any songs to sing? Anyhow, I'm not exactly devoid of news. I was in Boston for a day or so during August and I saw Dick Tryon, Mrs. Dick and Richard Westcott Tryon, Jr. What! You didn't know that Dick had a family of three now? Well, he has. Of course it is a little early yet to picture Dick, Jr., following in his father's footsteps — Course II, the pipe, mat burns, and all, but we won't have long to wait. Dick is still with the Standard Oil inspecting pressure stills and expects to be stationed at Boston for a month or so during the fall, all of which may interest you birds who hover around the Hub.

Further evidence of the influence of spring, warm moons, summer roses, and so on, lies in the announcement of Miss Ruth E. Briggs' engagement to Roger Parkinson. I am highly in favor of Parky's progress down the bridal path and wish him all the luck going. And before I forget it, I must tell you I am now quite a ways down the above mentioned path myself on account of the fact that I got married myself last August. If you will only write me I am now in a

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position to render seasoned advice on the matters closely akin to matrimony, such as coal bills, and why it's better to pipe the water from the refrigerator with a hose than to let it collect and pile up in the frying pan. In closing I call attention very proudly to the new address I have acquired which we now call home. — ROGER WARD, *Secretary*, 320 Washington Avenue, Kenmore, N. Y.

**'26** The Class's Marco Polo, Whitney Ashbridge, sends in another chapter of his travels: "The combined efforts of the temptress, Adventure, and of our old enemy, Spring Fever, proved a little too much for me so I came over here to Spain to study the language and customs and to see the country. I expect to stay in Madrid through August, and in the early fall, when it gets cool enough, to travel in the south of Spain. I shall see places that have always interested me — Granada, Sevilla, Ronda, Valencia, and probably a flying visit to Morocco as long as I am so near. During July and the first half of August I shall attend courses at the Centro de Estudios Historicos here in Madrid. It will help my Spanish and be exceedingly interesting as well. I shall take courses in the history of the Spanish language, art, architecture, and literature.

"Spain is quite as interesting a country as I had expected to find. It is full of striking contrasts. Madrid is a modern and progressive city, more American than European (except for the noisy French horns of the taxis, and subway trains that run on the left) with new buildings on wide, finely paved avenues; while in Burgos, one finds the atmosphere of centuries ago — a load of coal was delivered to the hotel by an oxcart, while donkey carts brought the *vinos corrientes* (cheaper grades of wine) in skins. A horse-drawn *diligencia* was among the vehicles that met the train. Withal a fascinating country.

"Last Sunday I saw my second bull fight. The king and two of his sons (one the Prince of Asturias, corresponding to the Prince of Wales) were there, and it was quite exciting — a matador badly gored, a picador somewhat mauled when his horse was killed, one bull jumped the barrier, horses disemboweled, and so on. Much more to see than at the first one which I attended in San Sebastian. I was there for the fiesta of Corpus Christi, and they had a religious procession in the morning and a *corrida de toros* (bull fight) in the afternoon, as is the custom here on feast days. Much better than New England blue laws, what? Best to every one."

The Gensec has been in correspondence with Bradford P. Young in his capacity as Chairman of the Meetings of the Western Pennsylvania Technology Club. He writes: "... There are not very many of the '26 graduates in Pittsburgh at present. I have seen Ken Lord and Mark Greer quite frequently. Incidentally we three are happy, though married. All of them are very anxious to know of any information that you may have of other members

of the Class and if you could find time to send me a little information in this connection we will certainly appreciate it. . . ."

The Secretary likewise is in receipt of a letter from H. A. Sargent: "A word as to my activities: I am actively engaged in the minor position of assistant engineer in the Dixie Construction Company — the construction unit of the Alabama Power Company — on hydroelectric construction. The present installation, the Jordan Dam, will develop 144,000 horsepower and it is nearing completion. We are quite thick here, we Tech men. Ralph Lewis, Course I, '25; Joel Tompkins, Course VI, '26; Gerry De Westfelt, Course I, '27, are holding down some of the other niches in the organization, while Joe Lockwood, Course I, '24, left us less than a year ago. Only recently I managed to slip the wool over the eyes of an unsuspecting girl and induced her to adopt for life the existence of the civil engineer: Miss Adele Weiler. It proved to be almost an all-Technology wedding at the bride's home in Glen Olden, Penna. Her brother, Chuck Weiler, Course I, '25, together with Milt Salzman, Course IX, '25, and Craig Keen, Course I, '26, were present, officiating in various capacities." His address is The Dixie Construction Company, Wetumpka, Ala.

Mooney Owen has recently sent out a questionnaire postal card to all the Course XV men in an effort to find out all their private affairs. He recently confided a few of his own to the Gensec: "... What have you been up to all summer? As I wrote you in May I was hoping to go abroad. Best of all, I got to go. I left the States on June 8 and finally got back the twelfth of September. Had quite a trip and visited many places of interest. During that time I visited Italy, Switzerland, France, Austria, Czechoslovakia, Germany, Holland, Belgium, England and Scotland. Europe is a great place to visit but I don't think I would care to live there — the U. S. A. is plenty good enough for me. . . ."

Announcement must be made with regret of the resignation of Jiggs Rogers as Secretary for Course XIII. He states that a wife and baby and a difficult job make this necessary. His last address is The Towers, West Bronxville, New York.

Notices of the following marriages have come to the Secretary: Robert M. Glidden to Miss Evelyn Duncan Peters on September 22 in Watertown; Elmer F. Knight to Miss Helen Ford French, on September 4 in Orange, Mass. The following engagements have been announced: Cedric Meredith Thompson to Miss Mildred Cannell; and Carleton J. Everett to Miss Helen Campbell. One birth has been reported — a daughter, Mary Elizabeth, to Mr. and Mrs. William L. Freeman, 1247 Lake Avenue, Pueblo, Colo.

A careful check of the amount of space occupied by the different courses in this 1926 column indicates that Course II and Course X tied for first place with a total of two and three-fourth columns each;

Course I came next with two and one-fourth columns; Course XV next with one and three-fourths columns. Course II had the greatest number of insertions — four out of a total of eight. Courses III, VI, VIII, XI, and XIII were not heard from at all. So the record stands without comment.

Report has come to the Secretary of the death of Arthur E. Watkins on May 2. The Class extends its sympathy to his family. — J. R. KILLIAN, JR., *General Secretary*, Room 11-203, M. I. T., Cambridge, Mass.

## COURSE IV

Herewith a few notes gleaned from thence and thither. Louis Pirola received the award of the Chicago Architectural Club Fellowship for 1928, and is now traveling in Europe. — Frank Roorda, winner of the Guy Lowell Fellowship, sailed in September and plans to spend the next six months in France, Italy, Germany, and England. — Bob Dean and Mrs. Dean are also bound for a year of travel, and will sail some time in October. — Gene Nowlen, on the other hand, was last heard of in Caen. He is expected by the New York customs officials almost any time now. — The Boston Architectural Club has wisely chosen for its Massier none other than the energetic Russell Brown. The anticipation is that, henceforth, all duties of that office will be discharged several months in advance.

Fred Buenz is still doing a flourishing business in Texas. Even though Fred has his habitat near the Mexican border, we are assured that the flourishing business is architecture. — Herb Beckwith and Mrs. Beckwith are returning from a summer in Europe. — Trevor Hogg is entering the fields of agriculture in addition to remaining in the fields of architecture. We trust that no confusion will result. — The Secretary is still engaged in the dissemination of knowledge at the University of Cincinnati, and awaits with eagerness letters from all. — ALAN K. LAING, *Secretary*, School of Applied Arts, University of Cincinnati, Cincinnati, Ohio.

## COURSE X

Today is registration day and the old Institute got under way as usual to a fast start with Uncle Horace's fine as a primer. How many of you who are in industry remember those days as fall comes on again? Your honorable Corsec has returned to the good old spot and finds the same old spirit running high in new and younger faces. Pardon me, Boys, how long are we out anyway, three or thirty? I haven't received any obituaries but from the pervading silence I would say some must be dead and buried. Come on, let's have some news from all of you.

Dwight Woods wrote a long letter 'fessing up on his history since graduation. Dwight got his first real contact with the cold world at the Sioux City Gas and Electric Company. As the boys all do in gas works, he found the work interesting but filthy. Dwight is now with the Nashville Gas and Heating Company at Nash-



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ville, Tenn. As Engineering Assistant in the Distribution Department where he has some fifty governors in their intermediate pressure system under his control. He says he is learning a whole lot that was not included in Course X, and is occasionally called to work to quiet some colicky governor in the small hours of the morning. It's darn good practice though, Dwight, for some day you may get married, even though there are no prospects at the moment.

My wife and I were happily married on July 3 in Newburyport. Bruce Humphreyville and Hoppie were on hand to officiate and uphold a fellow in need, and when it was over to discourage him as much as possible. After an extended honeymoon through the Southeast as far as North Carolina we returned to the Institute, and more specifically, the Research Laboratory.

There are still a few of the boys in the Laboratory. Broughton is here and has just evolved a new shaving soap which will alleviate some of the pains in shaving, except that it doesn't do away with the razor. Abe White is with the Laboratory, as happy and energetic as ever and is carrying on research in connection with high pressure work.

Jud Biehle has just left for a year or so in Turkey where he will teach in one of the American colleges there. — It's rumored that Prince Warner is married. Congratulations, Prince, and let's have the full particulars. — Ted Mangelsdorf is still cutting quite a figure in gas and fuel circles. He is in charge of the Bayonne station and gives some courses here in Cambridge. He is looking fine and prosperous.

Drop me a line, boys, in care of the R. L. A. C. — LEE CUMMINGS, *Secretary*, M. I. T., Cambridge, Mass.

#### COURSE XV

All Ye Good Course XV Men, Greetings! What have you all been up to during the past decade or so? Little news has found its way into the outside world as to our activities. However, we are not forgotten so let's see if it isn't possible for us to crash through strong and fill this column so chock full of choice tidbits that it will be the most interesting item in the next Review. Double postals have been sent to each and every one requesting standardized information. If you haven't received yours I must have the wrong address so send me the right one with that letter. If you don't send the letter, be sure and return the postal card. And another thing — start the year right by sending an account of yourself every so often, the oftener the better. — T. W. OWEN, *Secretary*, 1431 Eye Street, N. W., Washington, D. C.

**'27** So many of the fellows have announced engagements and marriages and so many of the others have announced their intention of announcing such, that your Secretary earnestly petitions that he be forgiven if he inadvertently omits some one from the list that follows. He requests that

he be respectfully and gently reminded of any omissions.

First off is the announcement made by Miss Lillian Brown's mother that on and after August 25 at Neenah, Wis., her daughter was to be known as Mrs. Leonard B. Riley. The Class awaits the shouts of joy from Len in his Course III and XII notes in the December Review! — Next is the informal announcement made to the natives of Rockland, Maine, in the *Courier-Gazette* of that resort: "Miss Mary Saunders of Brookline, Mass., accompanied by her fiancé, George C. Houston of Maplewood, N. J., arrived at her mother's cottage Saturday for a week's vacation." Your Secretary expects that the above announcement will have been formally confirmed before these notes reach the Class. — Then, early in June, Miss Hazel Gatcomb became the bride of Fabian Reed Tandler in the Episcopal Church at Melrose. Jim Flagg was one of the ushers. — Carlton G. Davies is to be in Boston on October 5, when he will marry Miss Harriet Goodacre of West Newton. Carl will take his wife back to Charleston, S. C., where he is working for his dad; but before that they will take a trip as far west as Cleveland. — "The marriage of Miss Francis Rogers Lang, daughter of Mr. and Mrs. Charles F. Lang of Prospect Street, and Harold Winthrop Akerley of Philadelphia, son of Captain and Mrs. Harris A. Akerley of Somerville, Mass., took place on September 15 at high noon, in the St. James Episcopal Church in Philadelphia. The ceremony was followed by a wedding breakfast at the Hotel Sylvania and the young couple left for a wedding trip to Atlantic City. Upon their return from this trip, Mr. and Mrs. Akerley will reside in Philadelphia." — "Miss Eleanor Danker, daughter of Mr. and Mrs. Daniel Danker of Brookline, Mass., whose engagement to George Cramton Lammert has just been announced, is a graduate of Simmons College." — Another of the Course Secretaries, Hank Kurt, XVI, is engaged. She is Miss Louise Lovejoy of West Newton, Mass., a graduate of Skidmore College in 1927. — Miss Anna Q. Eilertson, one-time secretary to the T. E. N. and now a member of the Dean's reception committee, announced her engagement to Edward Dale True, one-time General Manager of the T. E. N., and, perforce, a frequent caller at the Dean's Office. — Your Secretary had scarcely recovered from the shock of that announcement when Miss Winifred Van Horsen announced her engagement to F. Edward (Ned) Anderson. Thus endeth the record, except for the Secretary's very sincere felicitations to the parties concerned on behalf of himself and the rest of the Class.

Late in August your Secretary took a short trip. In Cumberland, Md., he ran into Jay Goldberg, '26, who was editing an employees' magazine for the Cellanese Corporation of America. His assistant business manager was Dexter Coolidge. We didn't get to see Dexter, but heard that he was getting along well. The

company makes yarn out of cellulose acetate. In Akron we telephoned Tom Knowles at the Goodyear Zeppelin Corporation to find that he was leaving within the hour for Boston, there to join Larry Coffin for a vacation. We tried telephoning to Hank Steinbrenner in Cleveland, but couldn't get him, and on the way back from Chicago we stopped off for a day in Detroit where Dick Cheney was waiting for us. Dick, who is in the local sales office of the Hobart Manufacturing Company, put on a demonstration which convinced your Secretary that he was erroneous in assuming that the Hobart crowd were salesmen for skillets, egg beaters, and pie pans. They had batter mixing machines as big as concrete mixers, as well as sausage grinders and meat slicers that offer a first rate means of committing suicide or homicide. In the afternoon, Dave Knox joined the party, and the three of us had a very pleasant reunion. Dave is a sort of sales and service engineer for the Perthamby Injector Company and is frequently called away from town to make installations and repair trouble. He had just returned from the wilds of northern Canada, but appeared to be none the worse for wear. — Bob Bigelow is in the San Francisco office of the Hobart Company, and Ed True has just begun his apprenticeship at the Troy, Ohio, plant. He has become an active member of the community: a golf player, automobile owner, and Sunday School teacher! — A recent shakeup has placed Dick Cheney in Buffalo for a time.

On July 1, Ned Anderson went with the Institute's Division of Industrial Cooperation and Research as an assistant to the Personnel Director, who operates what is in effect the Institute's official employment bureau, fitting men to jobs, and so on. A justly famous emperor of Japan once remarked that his object all sublime (which he would achieve in time), was to make the punishment fit the crime. The emperor had a job similar to the one Ned has. — Maurice Davier, who was also working at the Institute last year, has gone with the Johns-Manville Company at Manville, N. J. The only thing worthy of comment is the fact that he is living at the Asbestos Hotel, which, after all, doesn't deserve comment. — Jim Lyles, in New York, is kept busy showing visiting classmates the town in addition to the work involved in certain heavy responsibilities placed upon his shoulders by the company. — Ray Hibbert dropped into our office a few weeks ago. He is now in the Pittsburgh office of the American Tar Products Company, apparently not doing enough work to seriously interfere with his health and disposition. He reports that Hal Reed is in the road material department and won't get a vacation until later in the year. — Pub Whittier writes that he and Spung Spitzli (Secretary for Course X) are "endeavoring to learn something about the linoleum business" about which we hope to hear more from Spitzli himself next month. They are working for Congoleum-Nairn and

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living in Apartment 23 at 352 Belmont Avenue, Newark, N. J. He also said that George Houston (Course XV Secretary) has left the Murphy Varnish Company to go into his father's real estate business in Newark, and that he is going to take an evening course at the New Jersey Law School. — Sydney Berman wrote in the other day from College Point, N. Y., where he is working for the Sikorsky Airplane Corporation. He says that Course IX has at last come to life, and that if he gets any kind of coöperation from the Course he will have some Course IX notes for us in an early issue. We all look forward to the Course's first outburst. — Another visitor at the office not long ago was J. E. L. Tweeddale, VI, who was here on vacation from his job with the New York Edison. Your Secretary expected that Tweeddale would connect with Charlie Bartlett, so did not make note of some of the fellows in the Class of whom he had knowledge. Apparently he didn't meet Charlie. As we recall it, he said that Sisk was with the General Electric Company at the Schenectady plant and that Bob Carr was with Westinghouse, along with Jack Wever, Dan Sullivan, and Jim Collins.

Bert Houghton, VI, has been on leave of absence from the Harmon Shops of the New York Central Lines while getting parts of his innards spliced together. He was injured a few months ago while doing some heavy lifting, and is now recuperating from a bad siege in the hospital at his home here in Cambridge. — A piece of news which came to us under date of April 16 from a friend of Dick Hawkins at the Institute is reproduced here with apologies to Dick for the delay: "A letter mailed from the S. S. *Tuscaloosa City* in Australia has just been received from Richard P. Hawkins, '27. Last fall he and a friend got a job on the large freighter named above which is operated by the Isthmian Lines. They carried cargo from the States to Australia, making Brisbane, Sydney, Melbourne and Adelaide. At the time the letter was written, they expected to steam up the west coast of Australia and make seven ports in the Dutch East Indies. The itinerary from there on is a mystery. It may also be of interest to many members of the Class to hear that Dick successfully qualified as an A.B., a degree which is fairly uncommon among Technology men, even though in his case it bears a marine specification."

The noticeable absence from this issue of several of our usually faithful and always hard-working Course Secretaries should not be interpreted as slurs upon their faithfulness. Your Secretary believes that we shall all benefit by having reports from the large courses every other month and from the smaller ones at slightly longer intervals. Each Course Secretary will then have more time to gather information from more of the fellows. Let it be announced again here that your General Secretary welcomes any communications from any member of the Class who hasn't been able to reach his Course Secretary. He'll either forward the

letter or stick the news in with his own introductory notes. But whomever you decide to write to, do it now, especially if you haven't seen anything about yourself in these columns during the year just past. Also, let us remind you to pay your Alumni Association dues (if you haven't already) so that you won't miss the next number of *The Review*. — JOHN D. CRAWFORD, *General Secretary*, Room 11-203, M. I. T., Cambridge, Mass.

## COURSE I

The notes this month should be exceptionally interesting, for it is the first issue since vacations, and I have a lot of information to draw from. Before I start the news from the gang, I want to warn anyone who is thinking of living in this section of New York State to see me before moving. It is absolutely the windiest, rainiest, snowiest, coldest place in this Empire State. I am in charge of the Telephone Company in this county, and I never know when I go to bed if I'm going to be called at 2 A.M. or not until 5 A.M. to get a gang out to remove trees which have fallen through an important toll line, or to replace from one to a dozen poles which have been blown over by wind or broken by sleet and ice. And it is a queer thing—all the serious breaks occur after five o'clock in the evening. The A. T. and T. Company has lines which it maintains, and on which we do no repair work except in emergency. A very important line goes through my territory which carries a number of New York, Philadelphia, Scranton, and Washington circuits, besides many of lesser importance, to Syracuse, Buffalo, Cleveland, and Chicago. There are five cross arms of wire on the poles and each cross arm carries ten wires. That makes fifty wires or twenty-five circuits. Then there are "phantom circuits," circuits made from two other wire circuits, and there are "carrier circuits," several circuits on one pair of wires, which means that by varying the electrical frequency several conversations can be carried on simultaneously over the same pair of wires. In all there are seventy-five circuits and each circuit valued at more than \$50 an hour. Late in the afternoon a farmer cut down a tree, and misjudged the distance, so this tree took everything down in its path, including a pole and seventy-two of the seventy-five circuits. It was five miles out from here. Then the fireworks started. I think everyone in the New York Telephone Company and the A. T. and T. called in. After the first excitement was over we were able to get a gang started to the break. The road was impassable for a truck so we had to get farmers with teams to haul the material to the break. By 9 P.M. the gang had temporarily patched through a dozen circuits, and as it got too dark to do effective work, they came in, to return at daybreak and finish the job. That meant I could go home and get something to eat. I got to bed and was sleeping soundly, when at 11:30 P.M. the telephone rang with an A. T. and T. man on the

other end, "Will you have the gang out at daybreak?" "We train our men to work all night." "Why didn't the construction foreman report in?" In another half hour I had that straightened out. Then a few more hours of sleep and a check up on the gang to see if they were on the job at daybreak. As luck helped us we had all circuits working by 7 A.M., and by nine o'clock everything was permanently repaired. I got over that all right—then two nights later at 3:15 A.M. came another call. "Big fire at Marathon—it's burned two buildings and is coming in the rear of the exchange. What shall I do? I'll have to leave if it gets any closer." We rescued that exchange before serious damage was done. It meant getting fire departments from other cities, but at 4:30 the fire was under control so I could go to sleep again. I understand that I'm down here to get a lot of experience in a hurry. I think it is true.

I said last spring that I would print Carl Redd's letter. Here goes: "I noticed in the last *Review* that you said you had received no letters from us. I wonder if my last letter, written some six or eight weeks ago, failed to reach you. Old Al Beattie claims to be designing a warehouse for the Great Atlantic and Pacific Tea Company. (It will probably fall down as Al always took the wrong side of the structure.) He was formerly with the Tunnel Division in New York, from which department, quote me as saying, he was fired. George Evans is here with the Turner Construction Company, and spends his off hours trying to outdrink the Georgia Tech representatives. I have been here (Newport News) since February 1, and am with the J. E. Greiver Company, consulting engineers, of Baltimore, who have the supervision of the James River Project. Nash is going big with the Austin Bridge Company at Strawn, Texas. Shorty Newell hasn't written since he left Indiana, but Al says he saw him in New York."

"Newport News is a dandy place to live in but it has one of these chameleon-like climates. It is just full of good-looking girls, corn whiskey, and bridge-men. I know only of the last mentioned, but I have heard of the others authoritatively from George and other competent judges. My work is most interesting, and has the charm of being free from routine duties. I see my boss only once or twice a week, as he is pretty well tied down with office duties. The bridge here is four and a half miles long, so you cannot harp on my one-pier bridge this time. Give old Al a riding for me, will you? He is living in Greenwich Village where his natural tendencies toward dissipation can be loosed freely."

Al Beattie must have known something would come from Redd, as I got this: "I saw the March *Review*, in which you seem hard up for correspondence, so here is a hot shot from New York City. The only way left to get an answer from Carl Redd seems to be through your column. This is the last effort. Ed Sanel, Jake Rabinovitz, Johnny Kochanczyk,



and Jack Dunn are still with the Board of Transportation, and Jack Dunn told me that Gauchio (ex-27 from Mississippi) is on the Fort Lee Bridge. Bill Lempka is on Long Island on highways. I am now one fifth of the engineering staff of the Great Atlantic and Pacific Tea Company. I would appreciate hearing from you, and finding out about home cooking."

George Fexy gave us some news, which I'll pass along. "Of course you remember Vernon S. MacKenzie. He is working at the Calumet Sewage Treatment Works in Chicago. At first he lived at the Y. M. C. A., but left there, the reason being that he took unto himself a wife in the person of Miss Alice Lasmussen. (Another one gone.) Lawson is working for a consulting engineer. Bogardus was with the Sanitary District, but now is located somewhere in Pennsylvania. Rasmussen, the 'Happy Warrior,' is now in New York working for Barney, Arliss Company. Jumping snakes, I forgot my twin brother, Byron. He is in Steelton with the Bethlehem Steel Company, and his letters, outside of not being readable, carry the information that he is not having such a hot time there." — I received an interesting letter from Letourneau which I feel should be saved for future issues. However, this part is going in now: "I should like very much to hear from G. E. Thomas, Gormley, Emerson, the Ludons, Redd, and last, but not least, my fellow Railroad Option partner, the Right Honorable Paul Ivancich, who, I understand, is telling them what to do and how to do it in Philadelphia." Letourneau's address is 281 High Street, Bristol, R. I.

Before you forget this, make a good notation of it. If you will give me your telephone number or numbers when you write in, you can expect a call occasionally. I can make good use of this telephone company frequently if you'll give me your numbers. I'll get in touch with you occasionally, provided you are not too far away. As this goes to press I got notice that I'm made Wire Chief Supervisor, a promotion with headquarters at Elmira, N. Y. My future address is listed below.

The following just came in from George Copeland, c/o Austin Company, 510 North Dearborn Street, Chicago: "I feel a bit guilty for not having written to you before now, but I will attempt to save my conscience by giving a brief account of my activities since leaving school. After a rather rambling vacation through Arizona and California, I returned to Philadelphia last Christmas and started the new year right by going to work. I started as field clerk on a small construction job in Mt. Vernon, N. Y., with the Austin Company, engineers and builders. From there I went to Staten Island in March, and in May was transferred to this district as field engineer. Since that time I have been here in Peoria on a job for the 'Peoria Road,' a small railroad, which has taken a new lease on life in these parts. We have built a roundhouse, turntable, and all the fixings, so that the experience has been

quite varied. The work is now nearly complete, and we expect a move very soon. As usual, though, the location of the next job is never known till the last minute. I have not run into any of the gang in the immediate vicinity, and should there be any near here I should appreciate hearing from them." — LEROY G. MILLER, *Secretary*, 711 West Clinton Street, Elmira, N. Y.

## COURSE II

Once more we are starting a new year and, although the moment is auspicious to arraign the 1927 Course II men for permitting the Allendale Avenue postman to loaf on the job last summer, and to exhort them to bigger and more voluminous letters in the future, their devoted servant prefers not to risk this censure for repeating what has probably already been written better by the exalted secretariat, né super-exhorter, John Crawford.

To begin where we left off last May, we have the pleasure of hearing from Ed Burgess, whose letter was received just too late for the July Review. He writes: "I recently received a form letter from Jim Lyles hinting that a letter from me to the Class Secretary would be accepted. So I give herein a brief résumé of the past year. I spent four months in Europe as a little vacation. I went to work upon my return in October for the Ford Instrument Company in Long Island City, N. Y., where I still continue. I spent six weeks in December and January on the U. S. S. *Saratoga* doing an installation job of the Fire Control System. I expect to be on another ship sometime this summer — and that's about all. In case you keep a file for such things, my address is 59 West 70th Street, New York, N. Y." We are glad to hear from you, Ed, and hope you will not wait a year before writing again.

It is with pleasure that your Secretary records in the book of 1927 nuptials the name of Frederick Erdman. He was married to Mary Williams Nicol in Crawford, N. J., on June 15. He was expected to be at home at Robert College, Constantinople after October 1. Congratulations, Fred, you have the best wishes of all of us. — Bud Gillies had quite a crash last June and press reports stated he was seriously injured, but your Secretary received a letter from him dated June 27 in which he stated he was all right and ready to fly again. He had been connected with the aircraft squadron on the U. S. S. *Lexington* stationed at San Diego and said he expected to be at Stony Point, N. Y., on and off all summer. This fall he expected to be back at the Institute. We are all mighty glad you pulled through O.K., Bud, and we hope to hear from you again soon. — Hal Hibbard wrote in all the way from Buenos Aires, Argentina, on August 3, and was expecting to go from there to Santiago, Chile, until October 1. He is with the Goodyear Export Company. Hal is seeing quite a bit of the world, but about half of his letter was taken up with complaints about the weather. The other half was composed of toasts to the South American girls and boasts of the amount of food he

consumes. Nevertheless, he says he only rates fifty per cent on eating as compared with the natives.

I saw Harry Inskeep in Buffalo last summer when I drove through on a vacation trip. Harry is doing development work for the Linde Air Products Company and likes his job very much. On September 9, I returned to Detroit from a business trip to Fort William, Ontario, just in time to see John Crawford for an hour at the station, where he was waiting for a train to take him back to Boston. Dick Cheney, XV, was there to see him off, and previous to then I had not known that Dick was in Detroit. I do not think of anything else of interest except that I'd like you all to notice my new address below. — DAVID R. KNOX, *Secretary*, 13505 La Salle Street, Detroit, Mich.

## COURSE V

Once upon a time there were twelve young men standing all in a line, then three fell and now there are only nine. Be it known that Roger MacArthur has married a young lady whom he knew his senior year. I am sorry I do not know her name. Mac is still teaching school. — George Stanley is continuing his studies in organic chemistry, and this year is connected with Dr. Huntress's lab on the fourth floor. Reginald Wakeman is also up on that floor. He is researching on hydrocarbons under Professor Mulliken.

Joe Brady and George Standley were fortunate in being able to attend the American Chemical Society meeting in September. — Ken Vint went home for his vacation this summer to make sure it was still on the map. Ken's friend, Joe Burke, is just about finding time to play golf week-ends, aside from devising methods by which time, money and labor can be saved for a leather company. The third musketeer, Joe Brady, is learning rubber chemistry firsthand from Old Man Experience.

Stuart Bugbee, with the Diamond State Fibre Company, is being given interesting and sufficient work by the plant to keep both his mind and his body on the jump. — Eddie Dunn obtained a M.S. degree from the University of Illinois in June and is now in the chemical section of the United States Tariff Commission. I. R. MacDonald, '26, in the rubber section of the Bureau of Standards, is also located in Washington. The chemical work is beginning to get us. There is an enthusiasm evidenced for the work and the job in the letters which I get. Here's hoping the enthusiasm will pay dividends. — EDWARD T. DUNN, *Secretary*, 710 19th Street, N. W., Washington, D. C.

## COURSE VI

After several changes of address which perhaps unduly alarmed some of you, I have at last been located in the town of Palmer, Mass., not under an assumed name or hiding from the authorities, rumors to the contrary.

Much can happen during a long summer. Some of us have become engaged, some married. At least one of our

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Class, Nelson Clark by name, was in the center of the recent storm disturbance in Porto Rico, and at this writing no word has been received as to his fate. Perhaps others of us were also in the path of that storm. Some news has trickled through and I hope more of you will get in touch with me soon, so that we may all be accounted for by the next issue. [Nelson's good fortune rooked Charlie out of a bloody tale of storm and flood, for, while the hurricane was razing Porto Rico, Nelson was working right here at Technology. He returned late in July, secured a part time job with Major Smith's maintenance department, and is now taking subjects in the regular session. — J. D. C.]

I have before me an announcement in which "Mr. and Mrs. Lester Briggs Payne announce the marriage of their daughter, Mary Gertrude to Mr. Carl Herbert Peterson on Saturday, June 16, at North Weymouth, Mass." A further announcement states that the happy couple will be at home after September 1 at 9 Varney Street, Forest Hills, Mass. This came to me too late to be inserted in the last issue last spring. Mrs. Peterson is Earl Payne's sister. Earl, wishing to be a close second, comes forth with the announcement of his engagement to Miss Marie C. Weeber of West Roxbury. Congratulations and best wishes to both Earl and Carl. Earl further mentions that he spent two weeks in camp at Fort Eustis, Va., this summer, and en route passed through Conowingo where he had an opportunity to inspect the new power project that is being carried on out there.

I have another belated communication from R. L. Peterson in Yonkers, N. Y., who stated that at that time he was on his third job since graduation. He started with the Boston Elevated, leaving them for the Otis Elevator Company, and when last heard from was with the Westchester Lighting Company with offices in Mount Vernon. Pete is in the commercial engineering department, and states that he enjoys the work very much. He also writes that J. S. Buhler is doing well with the New York Edison Company in auditing work. — Charles A. Sanborn writes from Brooklyn, N. Y., where he is in full charge of the battery laboratory in the Brooklyn Navy Yard. He described some very interesting work testing submarine batteries and other batteries that are used by the Navy. In commenting upon the number of brand new engagements he states that he has been engaged for two years to Miss Pearson, and further states that he thinks "it won't be long now." Both Peterson and Sanborn expressed interest in my former battery business, and Pete wondered how I would handle competition from A. C. sets. I might say here and now that I have long since transferred that problem to another's shoulders. The battery business as it grew became unwieldy, and so I sold out bag and baggage to a garage in Jamaica Plain. I was able to strike a bargain that would make it worth while, and so my spare time is now my own.

[Here your General Secretary again breaks the continuity with a paragraph. Lawrence Burns, it will be remembered, took a job in the radiation measurements laboratory under Professor Stockbarger. He is still in that lab. — Howard Chinn is still with the Institute's E. E. Department, and is continuing his activity with the Green Short Wave Research. Most of Howard's work this year will be done at Round Hill, South Dartmouth, Mass. He and his crew have had a house furnished for them, complete with a guest room, a housekeeper, and (we presume) a radio set. The house is said to be on the very edge of the ocean, pretty well removed from everything but static. He will soon be finding out what it is like to be a light-house-keeper. — J. D. C.]

And now perhaps you wonder what I am doing in Palmer. I am in the engineering department of the Central Massachusetts Electric Company, and I was induced to leave the Tenney Company by an offer of a much better salary and what was to my mind a much better opportunity for the future. Some interesting engineering problems come up in this company which serves a total area of 400 square miles. I have been here since September 1.

Without doubt, many of you have made changes since I last heard from you, and I hope that after you read this you will spare me a few minutes of your time and write me all about it. Many of the addresses that I have in my files must now be useless, and I hope you will help me bring them up to date. — CHARLES A. BARTLETT, *Secretary*, 64 Park Street, Palmer, Mass.

'28 Information has been received from a very reliable source that Al Gracia, Course X Secretary, is teaching two nights a week in the Goodyear Industrial University, Akron, Ohio. Possibly this may be the beginning of another great pedagogue! — Elwood R. Anderson has been installing a New Orleans laboratory for the Ethyl Gasoline Corporation. His letter contains interesting facts about the various nationalities in that famous old river port. He makes special mention of the fact that even though the governor has instituted a big "Anti" campaign, it is still common for all the speakeasies to supply curb service for automobilists. — Course III men will be interested to know of the engagement of Harold Blackwood to Miss Margaret Allene LaRue, daughter of Mr. and Mrs. Emile Joseph LaRue of Brookline Avenue, Boston. — Roberta B. Lovely, Course VII, has a position as bacteriologist in the department of health of the Town of Montclair, N. J. — 1928 will learn with regret of the death of Hubert A. Vickery, Jr., who was a member of our Class last year. He died on May 28, 1928, at the home of his uncle, George R. Vickery, 28 Dearborn Avenue, Lynn, after an illness of about ten days.

The volume of class notes for 1928 has been kept small by two kinds of inertia. First, that which is caused by out-of-doors weather, and the second, that

which is attributable to the demon procrastination. — GEORGE I. CHATFIELD, *General Secretary*, Room 11-203, M. I. T., Cambridge, Mass.

## COURSE I

News of the gang has been coming in fairly well in answer to the pink sheet sent out by Ralph and Chat, but, to you fellows who haven't written yet, we're going to say right away, sit down as soon as you've read this and send in some first-hand dope about yourself. — Bennie Hough takes the honors this month as he has already written us twice. His first letter was in part: "It won't take long to tell the thrilling story of my experiences in the great world since I left 'collitch.' After carefully looking over a number of companies and concerns I decided that none of them were doing enough business to interest me, so I spent a happy summer at home. However, I'm all set now. Rudy Slayter got me a situation. I start work the seventeenth of this month with the Sewer Department of the Town of Milton. Rudy works there too, and probably knows all the sewers by their first names now. Confidentially, though, I aspire to higher things and I may leave this job next spring to go with the United Fruit Company who are very anxious to obtain my services but are momentarily embarrassed at having no opening right now.

"I don't know much dirt about the rest of the gang. I saw the well known firm of Meagher and McCarthy working in Professor Spofford's office about the middle of the summer. I understand they were retained in connection with the Lake Champlain bridge. Jim Morse left these parts for Texas but I haven't heard whether or not he got there. Gaucher was to have gone with him in the capacity of nursemaid or something but he was laid up in the hospital about then. Bob Harbeck and Bill Twirp, of course, are up in Maine with the Highway Commission."

Kent wrote again to say that the United Fruit Company came through with a job and he sailed for Guatemala on September 22. Mail addressed to him at 10 Monmouth Court, Brookline, will be forwarded. Of the fellows he mentions we can add that Mac is still in Professor Spofford's office filling the shoes of both Bud Wilbur and Napoleon Gelotte. Morse is in Texas all right but doesn't at all like the ten to one ratio of men to girls down there. Kirk is back from Maine and hard at work at the Harvard Business School.

Al Daytz writes from 176 First Avenue, Phoenixville, Penna., and says, "We graduated the fifth, I got married the tenth, and started work with the Phoenix Bridge Company on the eighteenth. I have passed the preliminary stage of practice and am now a full fledged detailer. . . . Jones got married last July. There certainly were a lot of marriages right after graduation. There will be a lot of competition for the class baby, but like one other great man once said, 'I do not choose to run.'" To Al and Jonesy



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we offer belated congratulations. And to any of the gang who are around Philly Al promises a good meal if they look up him and his wife.

Mangurian, Erickson, Josephs, Gilbert, Ballou and I didn't know enough to let a good thing alone and are back at the Institute for more. Mac and Bill Tandy (who is now in Professor Barrows's office in Alice Cobb's place) are also taking some courses on the side. Josephs loafed all summer while I worked for the local street railway and then we drove back here to the Institute together in a new car that Art bought a month ago. Bill Ericson had a card from Jake Jameson in the Italian Alps. Jake is due back from Europe soon and will then start working for one of the power companies on the Pacific Coast.

Locklin took a good vacation and then started work on October 1 in the operating department of the Georgia Power Company with headquarters in Atlanta. Bob Cook went to Venezuela some time in July. We haven't heard any details but understand that his work has so far been all inside away from the bugs. Pop Robinson finished his work this summer and is now in the process of getting located. We know that Ken Clark is out near Chicago but no one around here has heard from him. Joyce, Weinberg and Hodder are all in different parts of New York City. Hy has an interesting job with a contracting and realty company; Walt is helping to build the subways; and Bob—well, we just know he's there.

We had hardly finished typing these notes when Ed Ure called up and said he was coming over. Ed, Josephs, and I had a good bull session and had supper together. Ed is living at 169 Newbury Street, Boston, and is working in Waverly as research engineer for the Bemis Industries. His job for the first month was giving grades to the shovel on an excavation job at Dedham. Since then he has been in the laboratory, experimenting on various building materials. From Ed we learned that Hank Lamb is with Stone and Webster and a short time ago went down to one of their jobs at Pawtucket, R. I.; that Norm Parsons is with the New York Highway Commission with headquarters at Freeport, L. I.; and that Bill Hammond is with the maintenance department of the Pennsylvania Railroad with territory between New York and Philadelphia.

That's all our knowledge about the gang. But don't forget, fellows, that we're anxious to hear from you and to pass your experiences on to the rest of the bunch. — GEORGE P. PALO, *Secretary*, M. I. T. Dormitories, Cambridge, Mass.

#### COURSE II

Dwight Underwood is working in the mechanical experimental division of the du Pont Rayon Engineering Department at Buffalo, N. Y. He has been working on all sorts of manufacturing problems and says that his work is very interesting. He is the first '28 man on record to admit that his training in fibre stresses and factors of safety was actually usable. —

Course II also claims another record, the first postgraduate wedding. Francis B. Hart, son of Prosecutor and Mrs. A. C. Hart of Hackensack, N. J., was married to Miss Doris J. Weston, daughter of the late Major Henry R. Weston, U. S. A., on June 5. The ceremony followed the graduation exercises. — JOSEPH A. PARKS, JR., *Secretary*, 14 Caranauba Street, Roslindale, Mass.

#### COURSE IV

Reg Keith writes that he is busy commuting from New Haven to Stamford, Conn., every day, but he neglects to mention what he is doing that for. Reg received one letter from Isadore Silverman, thus saving Course IV from a completely blank position. Silverman says that he will be back at the Institute for another year. — Additional information on Course IV has filtered in from time to time. We have heard that both Henry and Harold Harrington are working for their father in the contracting business in their home town, Granitesville, Mass. — Abraham Wolf is employed by the J. R. Worcester Company, consulting engineers. — Mieth Maeser is working in the testing materials laboratory at the Institute. — ARTHUR R. KEITH, *Secretary*, 24 Maple Street, New Haven, Conn.

#### COURSE V

The overwhelming flood of one letter has greatly relieved the Secretary's responsibility. Dick Titherington is the only one of you who hasn't changed already, as the time is not too far distant when you'd have sold your souls to get in print. Some of you members of Course V of that active Class had better give up the idea that I'm a mind reader and send along some definite information for the next number. — The previously mentioned Dick sent his letter from the Hotel Asbestos in Manville, N. J., which might have been misinterpreted into a vague subtlety had he not mentioned the fact that he was working for the Johns-Manville Company. Dick in a typically succinct manner summed up the beverage situation in New Jersey, and reports the answer as quite satisfactory in case any are contemplating a change of diet. — I saw Howard Batchelder who is working toward an exalted degree while he is officially a small part-time assistant. In a fit of opulence Batch bought a Nash which appears to be the grandparent of the one Hettrick had last year. — Jim Coe, along with several others I haven't even been able to hear about, is doing some research at the Institute this year. — Archibald, an erstwhile member of our Class, dropped in to see me the other day. He is working for the Eugenics Record Office in Cold Spring Harbor, Long Island, N. Y. He will look up the family of any who are sufficiently curious to suffer the consequences. — Dempewolff, in his characteristic manner, decided that he needed a rest this summer and so made a tour of the United States, Canada and Mexico. He has no unnecessary comments to make on the relative

advantages of any of these countries. All rumor to the contrary, he expects to be working before October is started. — There is a vague idea about that Fred Wolf spent his summer abroad, but he'll have to prove it.

The only way to learn more is to tell more. It's your move now. — ALBERT S. DEMPEWOLFF, *Secretary*, 449 West 123d Street, New York, N. Y.

#### COURSE VI

Paul Johnson, former Tech Show General Manager, spent most of the summer vacationing at home (Honolulu) and when he wrote he was apparently making up for lost time — having a grand and glorious vacation. He was due to report for the General Electric Course at Schenectady in September and he is probably sojourning there at present. — Bill Murphy (W. J. from South Boston), he of the scholarly mien and the foul-smelling pipe, graciously wrote a newsy letter from New York recently. It seems that Bill, Bob Peatfield, Jim Cullen, and Fred O'Brien are working for the New York Edison and are all living together up in the Bronx. I don't know how the living arrangement is working out, but Bill didn't speak of any casualties so I presume that they have all survived to date. Incidentally, I also had a letter from Jimmie Cullen of the same crowd. Jimmie has been working in the Vandam Street Laboratories and seems to like it. The other boys have been on tests of various sorts, too detailed to mention. — Victor Decorte, from the wilds of Arvida, Quebec, where he is control foreman in the reduction plant of the American Aluminum Company, dropped a note to tell of his work. Victor mentions that the liquor is a little better than it was on the Senior Picnic. Be careful, Vic. Here's hoping you're standing up under it better than you did on the Picnic. And think of the rest of us here in the arid old U. S. A. when you blow the foam off a cool glass of beer. — Nort Case wrote that he is planning to return to the Institute to take graduate work in Fuel and Gas Engineering. Here's luck, Nort. You've got more courage than I have. Nort spent the summer on a power plant construction job on Long Island, installing switchboards, and so on. — I heard that Lockwood and Joe McQuillin are working for the New York Telephone Company, and that Fowler is with the Bell Laboratories. — PETER H. KIRWIN, *Secretary*, 1201 Fifth Street, S. E., Minneapolis, Minn.

#### COURSE VIII

Hand us the prizes — every member of Course VIII present and accounted for. Of course the fact that there are only three doesn't matter. It's the percentage that counts. — Ralph Evans is with the Eastman Kodak Company in Rochester, N. Y., where he has a position in the research department. — Bill Stafford is filling a similar position at the plant of the General Electric Company in Schenectady, N. Y. — Ye Scribe expects to be employed for the present at the Institute,

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in the Physics Department. — ARTHUR G. HALL, *Secretary*, 286 Commonwealth Avenue, Boston, Mass.

## COURSE X

First of all comes the real big news, the sensation of the hour. As these notes are written they find Dave Haynes a bridegroom of a few days. Congratulations, Dave, and extend to Mrs. Haynes our best wishes for a lifetime of happiness. Those of us who have known Dave for four years may feel some apprehension, but it is rumored that since Dave has become assistant director of the Buffalo station of the School of Chemical Engineering Practice, his conduct has been unimpeachably good. In fact, they say that the Senior Picnic was the occasion of Dave's last fling. Be that as it may, Dave has the honor of being the first man in the Course to gather the necessary courage and wherewithal to take the step.

Jack Rouleau writes from New York with a hearty endorsement of Vivandou's rouges and powders. In fact, Jack goes so far as to claim that for any girl or woman to be absolutely *a la mode*, Vivandou's cosmetics are a necessity. From the above you will gather, as I did, that Jack has gone on the stage and is writing "blind-fold" endorsements. The truth of it is, however, that Jack is chemical engineering for the Vivandou Company and that accounts for the outburst. It may be of interest to the Course members to know that when rouge has been moistened, its drying time may be calculated from W. L. & Mc—"Drying from one side with shrinkage, where surface evaporation is the controlling factor, with skin effect." So Jack says, "Govern yourselves accordingly." — More news of interest comes from Phil Taylor. He is in the Research Laboratory of Applied Chemistry at the Institute. From his brief but interesting letter I gather that he still has a "high pressure complex." He reports Southwick as being somewhere in West Virginia. Watch early issues of *Industrial and Engineering Chemistry* for the latest work by this eminent scientist, Phil Taylor. — Herb Dayton pauses in his Course X-A work long enough to vividly describe how he and Hoak put the Bang in Bangor this summer. It appears that one day last month Hoak admitted that New England was not so bad after all. Such an occurrence is unprecedented and should be made a holiday in New England. Between running tests and climbing mountains these two gentlemen passed a very profitable summer. Herb tried to awe your Secretary by telling of an imposing list of technical apparatus on which he had gathered data. However, he must remember that we all sat in on Robby's lectures. — From South Manchester, Conn., comes word from Sid Brown. He is working for the Rogers Paper Company. He claims that he has the best job in the world. If that is true, Sid had better look out, for Morry Beren is in the paper business too. He is in Rumford, Me., with the Continental Paper Company. You know, I had a hunch that these two boys were headed

for the paper business when I saw them decorating the old tub Myrtle with festoons of er-tissue paper on the occasion of the Senior Picnic.

Last, but not least, I have to report on the members of our Class in Akron. Ray Beveridge, Bud Reynolds, John Collins, and Ray Jack have an apartment together. That is putting it mildly; they have an apartment among them would be more like it. Beveridge, Collins and Reynolds are at Goodyear, while Jack is at Firestone. Consequently, the Supertwist adherents manage to effectually silence, most of the time, the lone Gum-Dipped man. Ray Jack is in the development department at Firestone, developing as only he can develop. Collins has been placed in the compounding department at Goodyear, before the finish of the training course he was taking. This work has so effected him that he now uses compound words and sentences. Reynolds and Beveridge, at this writing, are still occupied with the training course required of the entering engineers. Their assignments to regular positions will soon follow. There has been no change for the better in Bud. — ALBERT J. GRACIA, *Secretary*, 222 W. Market Street, Akron, Ohio.

## COURSE XIII

Course XIII managed to get a 66.6% reply for this issue by sending in news of two of its three members. Waken Chang visited several of the shipbuilding and drydock companies in New York before he left for China via Seattle. At the present time he is in Shanghai, with a Chinese company which operates steamers around the China coast. — Gil Ackerman is working with the engine department of the Federal Shipbuilding and Drydock Company in Kearny, N. J., on the installation of a large diesel electric drive. — GILBERT J. ACKERMAN, *Secretary*, 9 Gifford Avenue, Jersey City, N. J.

## COURSE XIV

Of the nine graduates of Course XIV, Class of 1928, information has been received concerning seven. Your Secretary has received communications from Basilio, Emerson, and Paige as well as a very interesting letter from Joe Collins. — A card from Basilio indicated that he was spending a very enjoyable vacation at Barre, Vt. As Swope Fellow in physics, Basilio has returned to the Institute for advanced study leading to the degree of Master of Science. — Emerson is located at Newark, N. J. He is employed in the manufacturing engineering department of the Western Electric Plant at Kearny. Emerson spent the summer in the laboratory of the Hygrade Lamp Works at Salem, but discovered that laboratory work did not agree with him and as a result he secured his new position with the Western Electric. — Harlan Paige has written from New Rochelle, N. Y. Following his desire for electric railway work Harlan has obtained a position with the New Haven Railroad in one of its shops on the electric division. Harlan and John Coolidge appear to be operating

the road to everybody's satisfaction. We all join in wishing Harlan the best of luck in his electric railroad work. — At the request of your Secretary, Joe Collins has come through with a good deal of information. In his humorous fashion he describes his frolics during the summer at Silver Beach, Falmouth, Mass. He writes that one day Harlan Paige dropped in at Silver Beach and gave him a pleasant surprise. Joe reports that Bialkowsky is employed in a paper mill near Holyoke, and that he (Harold) expects to return to the Institute in a year or so to take up graduate work. Joe has returned to the Institute wearing leg braces but is able to get around exceedingly well. — Mid Chism became a member in good standing of the society of married men on Saturday, June 16, 1928. Paige was present at the ceremony, and it is taken for granted that he offered congratulations for his fellow classmates. At the time of Paige's writing, Mr. and Mrs. Chism were located in Seattle, Wash. — Although no word has been received from Kessler, it is supposed that he spent the summer with the Sure Shot Torpedo Company as he expected he would. He has probably returned to the Institute for graduate work. — You are probably acquainted with the fact that your Secretary is employed by the General Electric Company and is enrolled in the so-called test course. — CHARLES E. BERRY, *Secretary*, 103 Nott Terrace, Schenectady, N. Y.

## COURSE XV

Ford Sammis is unanimously awarded first prize for having his letter in on time and for giving us the largest amount of news both about himself and about other members of the Class. As Ford expresses it, he is in charge of "the Space and Equipment Section of the Research Division of the Personnel Department of Henry L. Doherty and Company." Any member of the Class who can inform us as to just what all that means is eligible for another prize. At any rate, Ford seems to like his work with the big company. — Ford says that Dick Arf is also in New York, with the Carrier Engineering Company. The latest problem that Dick has been attempting to solve was that of changing a barrel of bluefish into smoked herring. Sounds bad, Dick. Better tell us more about it. From the same source of information we learn that Jim Flagg is designing structural steel girders and that Ike Stephenson is in Europe, studying commercial aeroplane conditions. One paragraph of Ford's letter was extremely difficult to interpret (not entirely due to the familiar Sammis scrawl), but I have the impression that he wanted to tell me that Ed True is no longer a single man. If such is the case, every man in the Course should be duty bound to write Ed a letter of congratulations. If this is an error, we'll all probably get a letter from Ed. [See the Class of 1927 notes. — The Review Editors.]

The second letter came from Joe Gaffney who is in Chicago learning the mail order business from Mr. Sears, Mr.



1928 Continued

Roebeck, and Mr. Company. He informs me that Bud Gray, Bunny Burnell and Cal Caldwell are also taking the aforementioned company's merchandise training course. According to Joe they are all enjoying the work and having a great time in the Windy City. — Frank McGuane writes from New York where he has associated himself with the "most up-and-going, and progressive company in the country," the New York Telephone Company. Mac says the city life is agreeing with him and that he likes his work immensely. According to Frank, Jack Chamberlain has entered Harvard Medical. It certainly is amazing what Technology and the T.C.A. will do to a man. — The fourth letter received came from Eric Hartman who is now in Rochester, N. Y., with the Eastman

Kodak Company. Eric tells me that he has been placed in the foreign service department, and will be sent to the Boston branch in November. This last statement is not intended to imply that Boston is to be classified as foreign territory. After several months in the Boston branch Eric says he will be sent abroad — possibly Argentine, Hawaii, China, or what have you. — Of course you all know that Ralph Joep is boosting The Technology Review and drumming up business for the Alumni Association. Course XV men are hereby warned to be prepared to ward off his advances should he locate them anywhere, any time in the future. — George I. (Chat) Chatfield is located with the advertising department of the Lever Brothers Company. Rumor has it that Chat has been demon-

strating the manifold advantages of Life Buoy Soap in a bath tub in a Jordan Marsh window.

As for myself, I have been forced to associate with Twisty Malmquist, Art Nichols, Al Gracia, Bud Reynolds, Ray Beveridge, and Johnny Collins (Courses II and X) who are also taking the staff training course at the Goodyear Tire and Rubber Company in Akron, Ohio. There are twenty college graduates and engineers in this training group and we are just now completing three months of factory assignments which were intended to give us an insight into the production methods of a large rubber company. The work has been very interesting and right now we are all waiting for our permanent assignments. — PAUL E. RUCH, *Secretary*, 853 Harvard Street, Akron, Ohio.



## NEWS FROM THE CLUBS



### *Detroit Technology Association*

**A**FTER a summer of little activity we are getting started on our program of regular and special meetings for the coming year. We find that a number of Technology graduates have moved to Detroit during the last few months, and we trust that all will become actively affiliated at once with the Detroit Technology Association.

We are glad to announce that our scholarship committee under the able chairmanship of C. W. Loomis, '16, has accomplished remarkable results, and by another year will have sufficient funds to assist very materially some Michigan boy of the right type desirous of a Technology education.

Among recent notable achievements by local Alumni we would list the completion in record time of the Fisher Building engineered by H. C. Blake, '06. This combination office building, theatre and garage ranks as one of the outstanding structures of the country. Two other alumni, J. N. French, '11, and Joseph Matte, '09, share in the responsibility, being of the organization of Albert Kahn, Inc., the architects for the project.

Two other local buildings of note, the Penobscot Tower and Union Trust Building, have their connection with Technology through the work of T. K. Hine, '16, and M. W. Pettibone, '17, both of whom are connected with the architectural firm of Smith, Hinchman and Grylls. — E. F. DOTEN, '19, *Secretary*, 120 Pingree Street, Detroit, Mich.

### *Technology Club of Lower Canada*

The Technology Alumni of Montreal and its vicinity are endeavoring to become better acquainted and are succeeding in many ways. An enjoyable get-together dinner was held at the Queen's Hotel on Thursday, May 3, and plans were discussed for increasing our active membership. The dinner was followed by some

interesting films on the telephone field of research, giving instruction on such subjects of public interest as Trans-Atlantic telephony, Television, and the basic fundamentals of the telephone science.

Other get-together functions are planned and more will be heard of them in the future. — JOSEPH H. TOWNSEND, '24, *Secretary*, 337 Maplewood Avenue, Montreal, P. Q., Canada.

### *M. I. T. Club of Central New York*

The annual outing and field day of the M. I. T. Club of Central New York was held on August 16 at Drumlin's Country Club of Syracuse, N. Y. Due to severe thunder storms not very much golf was played, but twenty-eight sat down to dinner, including Merton L. Emerson, '04, Orville B. Denison, '11, J. M. Hastings, Jr., '12, and F. W. Barker, Jr., '12.

Orville B. Denison has recently come to Syracuse to accept a position with the Lamson Company, manufacturers of conveyor systems. Dennie has many friends here among the Alumni and we are very much pleased to see him. — F. W. BARKER, JR., '12, *Secretary*, First Trust and Deposit Company, Syracuse, N. Y.

### *Technology Club of Lake Superior*

Among the visitors President Coolidge received at his executive offices in Superior, Wis., was a delegation from the Technology Club of Lake Superior, on August 28. This group was presented by Frank Hayes, '90, and included the following: Holman I. Pearl, '10, from Crosby, Minn.; R. C. Robman, Duluth; Leland Clapper, '09, Two Harbors; George P. Palo, Superior; D. H. Ranford, Duluth; William R. Peyton, '90, Duluth; and S. H. Gulliford, Oshkosh. The President of the Club, William C. Lounsbury, '03, was out of the city and could not be

present. President Coolidge manifested a great deal of interest in this school of his home state and he chatted for several minutes with this delegation. — J. A. NOYES, '12, *Secretary*, 1507 Alworth Building, Duluth, Minn.

### *Technology Club of Florida*

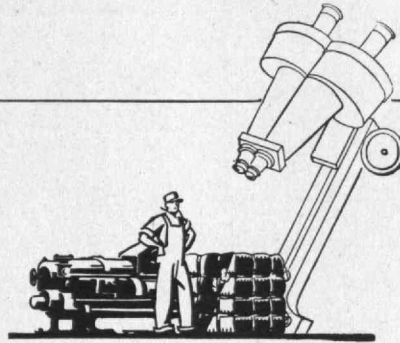
Our President, Horatio N. Parker, '94, has another baby. She is almost a year old, but she is young at that. The father says she is the worst they ever had. He should not blame her. — George W. Simons, Jr., '15, has been appointed City Planner for Jacksonville, Fla. Why they appointed a sanitary engineer for a city planner beats me. They should have selected me, then I would have appointed him as my assistant. Besides, he had the bad faith to select two architects who had never been to Technology to help him.

Dr. B. L. Arms has been very active lately in health work over the state. Now, do not get the idea that the state is not healthy. A new Board goes in soon and the doctor is just buzzing. There is nothing like a fine gesture. — Nelson M. Fuller has spent the summer in a military camp in Massachusetts. Why any one should leave Florida to go to Massachusetts at any time is beyond comprehension. (Just talked to Mr. Fuller himself and he explains that the city paid him double for leaving town.)

Professor George E. Barnes, '23, Associate Professor of Engineering at the University of Florida, has just returned from a trip to Nicaragua where he acted as consulting engineer on a water supply project, and from Honduras where he put in an irrigation system. Both these enterprises were for the Standard Fruit and Steamship Company of New Orleans. (The climate and scenery were wonderful, but the insects!) — HENRIETTA C. DOZIER, '99, *Secretary*, 319 Barnett Building, Jacksonville, Fla.

Here,  
*Gentlemen of the Committee,*  
 is the answer  
 of one industry

*No. 6 of a series inspired by the report of the Secretary  
 of Commerce's Committee on Elimination of Waste*



## LOOKING OVER vs. OVERLOOKING

**I**T is the broad conception of industrial responsibility that overlooks no small detail of manufacture.

Is a ten-thousandth of an inch in the thickness of a mica condenser sheet important? Does a time-interval of a thousandth of a second matter? A thousandth of an ampere of electric current?

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 FOR THE  
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# DIVISION OF INDUSTRIAL COÖPERATION & RESEARCH

**T**HROUGH this Division the equipment of the Institute laboratories and the experience of its staff members are made available to a limited extent for the study of industrial research problems. The original "Technology Plan" of regular coöperation with such companies as had executed a yearly contract is conducted as heretofore. In addition the Division now offers a second method for the study of occasional problems to industries which do not require a continuous service. Details of this method will be supplied upon request to those interested.

*All inquiries should be addressed to the*  
DIVISION OF INDUSTRIAL  
COÖPERATION & RESEARCH  
MASSACHUSETTS INSTITUTE of TECHNOLOGY  
CAMBRIDGE

## CHECK THE SUN BATH

(Continued from page 11)

profession if the public is to be protected. After listing a large number of cases in which the use of ultraviolet therapy is harmful, the author concludes, "The present day tendency is for private clubs and in some instances distributors of ultraviolet equipment to install a battery of lamps in a room where the business man can come during his noon hour or other most convenient time and take his sun bath in this luxurious, inviting parlor.

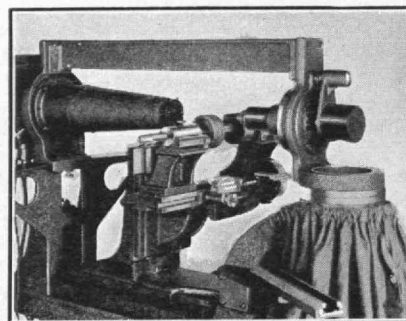
"So far as can be learned these parlors do not require any physical examination and it is not compatible with the law of averages for them to give exposures indiscriminately without injuring or perhaps killing some member of the club or a friend of the promoter in the second instance.

"Such installations for public patronage of energies so potent of danger as well as good should be discouraged."

An inquiry into this problem by the medical profession should tell its own members when and upon whom they should not use radiation, and it should be able to tell the general public, the physicist and the manufacturers of lamps which ones, if any, of the radiations are dangerous.

**I**T is the problem of the individual medical man to get for himself knowledge and experience with the physics of his equipment that is the equal of his knowledge of the chemistry of his drugs. Let him study the kind of radiation.

(Concluded on page 64)



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*... this closer control of industrial processes*

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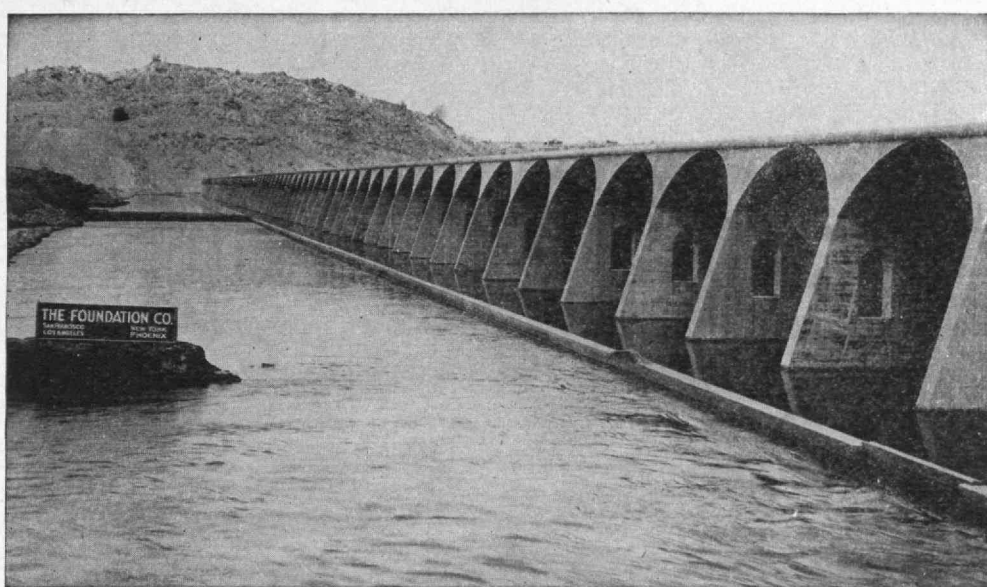
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# DAMS,



## Man Taught By Nature



GILLESPIE DAM, GILA BEND, ARIZONA, CONSTRUCTED BY THE FOUNDATION COMPANY

**I**NSTINCT in the beaver taught it to back up the streams with brush and mud dams, to store the water in still ponds in which to live and preserve its food. Reason and experience of man has taught him to dam the streams for the storage of water for power, for irrigation, and for other purposes.

In the present day the use of water for hydro-electric development has directed the interest of industry toward harnessing all available streams where power can be distributed to industrial centers. The desire of the farmer to reclaim the arid waste spaces and make them fertile has brought about the storage of water and its directed distribution to these spaces. Flood control by the storage of the waters, to prevent destruction of life and property, is receiving constantly increasing attention. These purposes are being accomplished by the construction of stable dams securely founded.

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AND CABLE COMPANY**

Boston, 25, Mass.

## CHECK THE SUN BATH

*(Continued from page 62)*

tion which he needs and make his prescription in accordance. It may be that there is need for a source that closely imitates the sun, or one that is particularly strong in one part of the spectrum and weak in another part. Reputable lamp makers, aided and guided by physicists will fill the prescription, just as the druggist fills the prescription and does not supply a cure-all mixture made up of titbits of everything that can be corked in the same bottle. The physician should no more undertake to meet his own requirements himself than he should go into a back room and brew a mess of herbs to obtain drugs for his patients.

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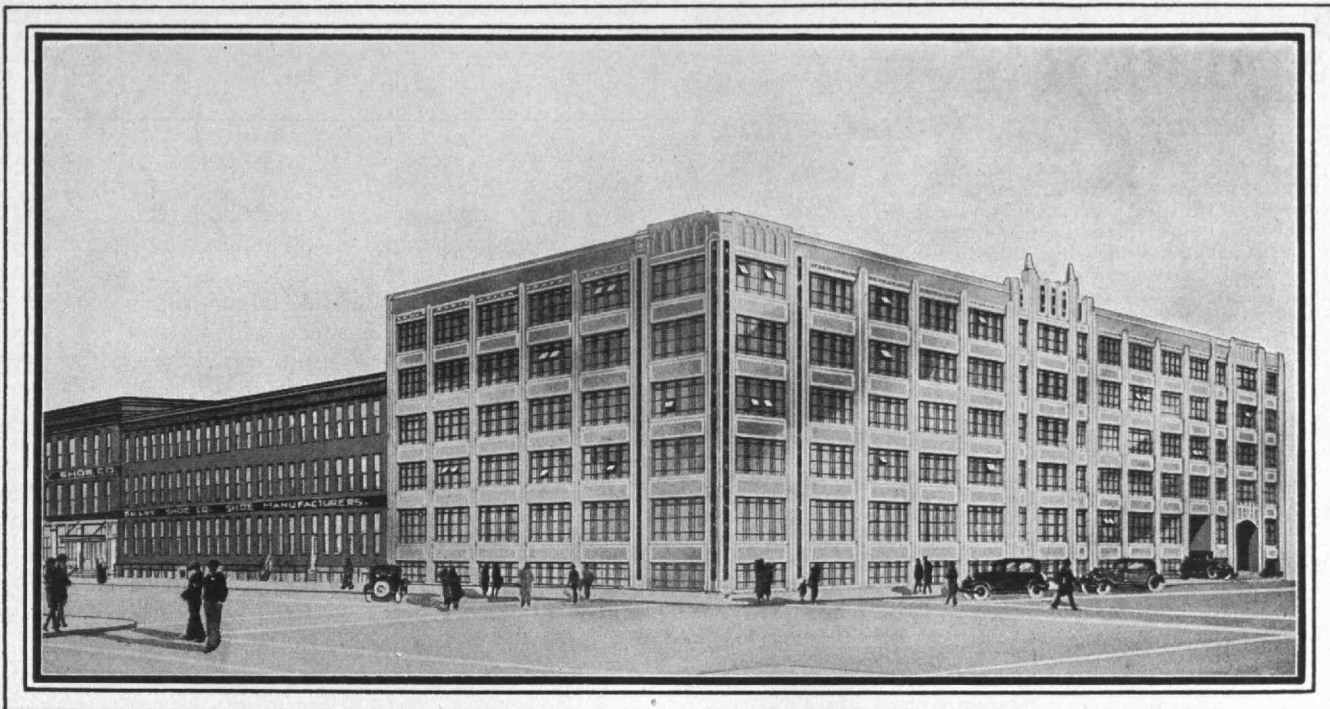
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Thirteen years' experience with Johnson Temperature And Humidity Control convinced The Selby

Shoe Company of its value — in accurately maintaining the constant temperature and humidity required, and thus improving and increasing production and decreasing costs.

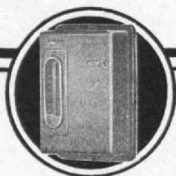
This company's experience with and opinion of Johnson Temperature And Humidity Control, as endorsed by the two installations which followed the first, is a deciding recommendation — to *all* factories where temperature and humidity vitally effect the quality of product and quantity production, and where an annual fuel saving of 25 to 40 per cent is an item.

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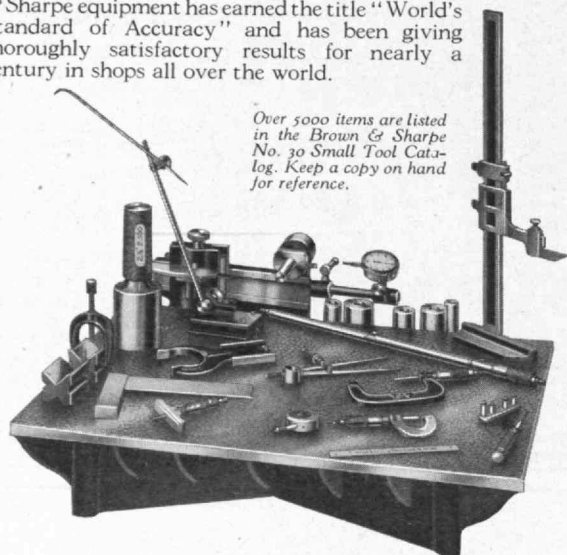


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## BOOKS

*Concluded from page 28*

from the day of Leonardo da Vinci to our own. It is a book which should be read by every high school boy and every college freshman and sophomore who is training himself for the profession.

"The Elements of Industrial Engineering" is a textbook on industrial management, which attempts to use, as fully as possible, illustrative material drawn from the student's life inside and outside the class room. Professor Shepard is Professor of Industrial Engineering and Management at Purdue.

THE TECHNIQUE OF RESEARCH IN EDUCATION, by Claude C. Crawford, Ph.D. \$2.50. 306 pages. Los Angeles: University of Southern California.

**T**HIS is a "how-to-do-it" manual for students seeking advanced degrees in education, who must pick a subject, conduct a research, and report upon it. It contains little of interest to others.

### Text Books

MECHANICS FOR ENGINEERS, by Julian C. Smallwood and Frank W. Kouwenhoven. \$2.50. 185 pages. New York: D. Van Nostrand Company, Inc.

FIXATION OF ATMOSPHERIC NITROGEN, by Frank A. Ernst. \$2.50. 154 pages. New York: D. Van Nostrand Company, Inc.

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Therefore, for the additional cost of your Differential equipment, we are convinced that we have selected the best.

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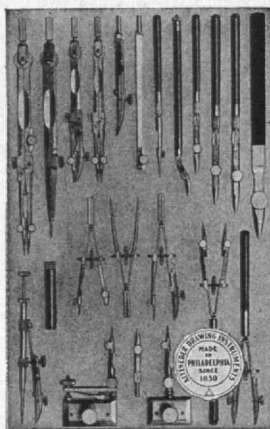
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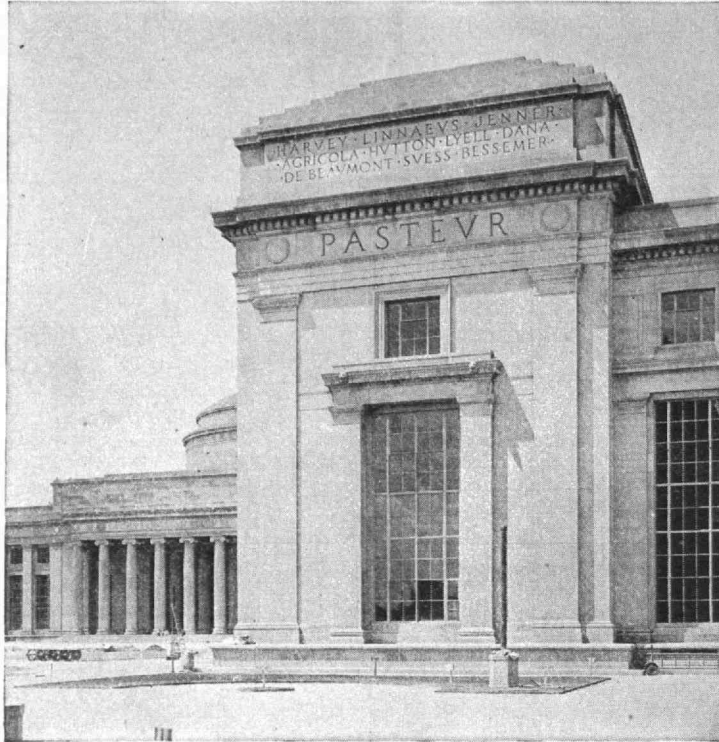
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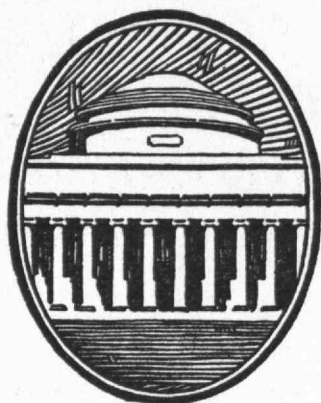
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